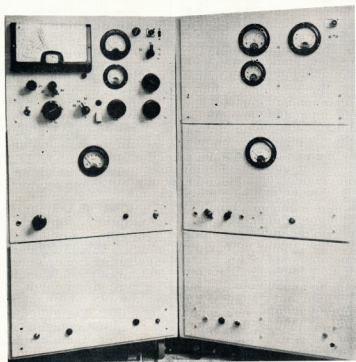


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1D8	7/6 3a £1	7B8	7/6
1H5	5/- 5a £1	7C5	5/- 5a £1
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1K5	5/- 5a £1	7W7	2/6 10a £1
1K7	5/- 5a £1	7E6	3/6 7a £1
1M5	5/- 5a £1	12A6	5/- 5a £1
1N5	5/- 5a £1	12AH7	5/- 5a £1
1P5	2/- 10a £1	12AT7	7/6 3a £1
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EDITORIAL

★

MEMBERSHIP REMINDER

EVERY so often, at the risk of
belabouring the point, readers
are asked "Are you a member of
the Wireless Institute of Australia?"
Because you are not does not make
it mandatory that you should be, for
it is not the Institute's policy to
unioneer Amateurs in the sense "You
be a member or else."

Nevertheless, to the right thinking
Amateur, his hobby is available to
him because he is represented officially
by an organisation pledged to
speak for him and generally look
after his interests. Without repre-
sentation he would be battling up
hill to protect the frequency alloca-
tions used by the Amateur Service
all over the world.

When membership grows in an
organisation like ours, then better
facilities can be made available. The
W.I.A. already provides a technical
publication; up-to-date annual call
sign book; provides for QSL card
distribution to members; arranges
lectures, picture nights, social nights,
field days, contests, A.O.C.P. classes,
slow morse transmissions; it main-
tains liaison with the licensing
authority to bring about better con-
ditions for the Amateur as the art
dictates changes; liaison on a world-
wide basis is carried on with Amat-

eur Societies through the Interna-
tional Amateur Radio Union; branch-
es and zones are organised for the
Amateur who lives in the country;
affiliated clubs are also fostered and
encouraged to become part of the
W.I.A. organisation; disposals equip-
ment is made available to members
in the States of Commonwealth
where this is possible; a library of
technical publications is available
for the use of members.

All these things are available to
members, only because the W.I.A. is
an organisation with a purpose—to
look after the interests of the Amat-
eur Service in Australia and encour-
age young people to take up radio
as a hobby in the national interest.

This purpose can only be ex-
panded and maintained by member-
ship without which no organisation
can exist. If the W.I.A. did not exist,
you might not have an Amateur
license today. Give us your support
as an Amateur, a Short Wave Listen-
er or an interested party. You will
find the membership information
freely available upon application to
the Secretary of the W.I.A. Division
in your State.

Could we suggest you obtain a
membership form and join now?

FEDERAL EXECUTIVE.

THE CONTENTS

Modulator Design with OC26 Transistors	3	Commonwealth Technical Training Week	7
A 72 Mc. V.F.O. for 144 Mc. Drive	4	Amateur in Exile	7
A V.F.O. for 9 Mc. S.S.B.—Amendments	4	Correspondence	15
Prediction Chart, May '61	8	DX	13
Meet the Other Amateur and His Station: Vol Molesworth, VK2VO	9	Divisional Notes	19
The North Coast and Tablelands (N.S.W.) Zone Convention	10	Obituary	20
		Sideband	17
		SWL	16
		VHF	11



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February 1961 issue.

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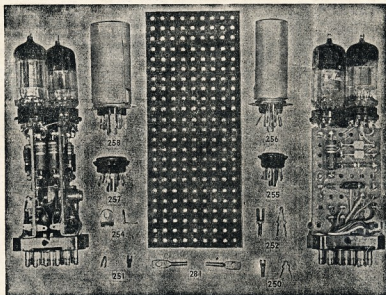
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MODULATOR DESIGN WITH OC26 TRANSISTORS

A. ROUDIE,* VK3UJ

THE application of transistors to low power modulators can result in smaller transmitter power supplies, thus reducing the cost of transmitters designed to operate from storage batteries. The additional increase in overall efficiency may also be considered a worthwhile improvement.

A transistor modulator requires only a fraction of the space taken up by a comparable valve unit and allows full use of the high voltage power supply for the r.f. section of the transmitter. Among the advantages of a modulator of this type are compactness, high overall efficiency, no warm up time, and low quiescent current when not modulating.

The design to be discussed will modulate a transmitter r.f. output stage having an input of up to 25w. at any desired impedance level, depending on the number of turns on the secondary of the modulation transformer.

The design investigated is required to modulate a p.a. stage of 25w. anode input from a 325v. rail, i.e. modulating impedance:

$$\begin{aligned} Z &= E^2 \div W \\ &= 352^2 \div 25 \\ &= 4,225 \text{ ohms.} \end{aligned}$$

The power output required from the modulator is, of course, 12.5w. for 100 per cent. modulation. (With sine wave input—Ed.)

The push-pull Class B "Super Alpha" configuration has been chosen for this modulator because of the savings in components and ease with which the penultimate stage operates. An added advantage is that only input and modulation transformers are necessary—no separate driver transformer is required. Some 9 db. of feedback is applied (with nominal transistors) which not only enhances the frequency response and minimises distortion, but reduces the effect of transistor characteristic spreads. Fig. 1 details the schematic of the prototype modulator.

Peak current rating of the OC26 is 3.5A. and the "knee voltage" approximately 1V. Assuming a 12v. supply rail, the load per transistor may be determined: $RL = E_c \div I_c = (12 - 1) \div 3.5 = 11 \div 3.5 = 3.15 \text{ ohms.}$

Rec is thus $3.15 \times 4 = 12.6 \text{ ohms}$ (assuming Class B operation).

Output transformer impedance ratio is $4225 \div 12.6 = 335$. Output transformer turns ratio = $\sqrt{335} = 18.3$.

For a peak collector current of 3.5A. a nominal OC26 requires an input base current of 140 mA. At a collector-emitter potential of 1V., the base-emitter potential under these conditions is some 800 mV.

The OC74 transistor can supply this peak drive power for an input of 1.4 mA. at a base-emitter potential of 330 mV. approximately. The peak input impedance looking into the OC74 is thus: $Z = E \div I = (800 \div 330) \div 1.4$ which equals 800 ohms approx., i.e. an

The above article was published by Mullard-Australia Pty. Ltd. in "Mullard Outlook," Australian edition, May-June, 1960.

Extracts from this are relevant to the circuit design and operation only, and those parts to do with transformer design are omitted as it is felt that few Amateurs are interested in making their own transformers. Full acknowledgment is given to Mullard-Australia for the extracts and circuit diagram reproduced.

average input impedance would be almost twice this figure—say 1,500 ohms.

The microphone input transformer may be designed to match the 50 ohm source impedance of a carbon microphone to this value:

$$\begin{aligned} \text{Impedance ratio} &= 1,500 \div 50 = 30. \\ \text{Turns ratio} &= \sqrt{30} \times 50 = 5.45. \end{aligned}$$

Neglecting input transformer losses, the primary input requirements become:—

$$\begin{aligned} V_{\text{peak}} &= 1.13 \div 5.4 \\ I_{\text{peak}} &= 1.4 \times 5.4 = 7.8 \text{ mA.} \end{aligned}$$

With 9 db. of negative voltage feedback applied, $V_{\text{peak}} = 0.21 \times 2.82 = 0.59 \text{V.}$

Assuming an input transformer efficiency of 80 per cent, $V_{\text{in peak}} = 0.59 \times 1.2 = 0.71 \text{V.}$

The input power is thus: $P_{\text{in}} = 0.71^2 \div (2 \times 50) = 5 \text{ mW.}$; $P_{\text{out}} = 15 \text{W.}$ Therefore power gain: $(15 \times 1,000) \div 5 = 35 \text{ db. approx.}$

Input sensitivity = $0.71 \div \sqrt{2} = 0.5 \text{V. r.m.s. (into 50 ohms)}$, which is conveniently supplied by a carbon microphone.

The tertiary feedback turns may be determined by considering the voltage gain from input to the primary of the modulation transformer.

Input voltage (without feedback) = $0.71 \div 2.82 = 0.25 \text{ V}_{\text{peak}}$.

Output (primary) voltage at 15W. into 12.6 ohms = $\sqrt{15 \times 12.6} = 13.8 \text{ V. r.m.s.} = 19.4 \text{ V}_{\text{peak}}$, say $20 \text{ V}_{\text{peak}}$.

Voltage gain (without feedback) = $20 \div 0.25 = 80 \text{ times.}$

Feedback Fraction — $B = (A - M) \div AM$,

$$\begin{aligned} &(80 - 28.5) \div (80 \times 28.5) \\ &= 51.5 \div 2280 \\ &= \text{one-fortieth.} \end{aligned}$$

The tertiary turns are thus $120 \div 40 = 3 \text{ turns. (Primary turns 120 total.)}$

No allowance has been made in this calculation for the loading of the tertiary winding or for coupling losses. In practice, it was found that four turns were necessary to obtain 9 db. of feedback, but at least the approximate calculation performed above serves as a guide.

MEASURED PERFORMANCE OF THE PROTOTYPE AMPLIFIER

Maximum power output at onset of clipping: 15.6 W.

Power frequency response at 10 W. (150 c.p.s. to 18 kc.): $\pm 3 \text{ db.}$

Total harmonic distortion at 1,000 c.p.s. and 10 W.: Less than 0.85%.

Total harmonic distortion at 1,000 c.p.s. and 15 W.: Less than 1.25%.

Total current drain at 15 W. (sine wave): 2.1 A.

Total current drain at 15 W. (average speech peaks): 0.6 A.

Power efficiency: 60% approx.

Total quiescent current at 25°C.: 60 mA.

Stability factor 25–55°C.: 6 approx.

(Continued on Page 7)

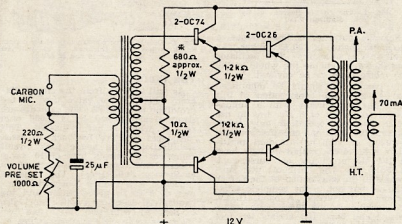


FIG. 1

* Adjust base bias for total quiescent current of 40mA not including microphone current.

A 72 Mc. V.F.O. FOR 144 Mc. DRIVE*

Using the Kalitron Circuit for High Stability

BY "OXO"

THE unit to be described is the outcome of a successful attempt to avoid any possibility of generating harmonics falling in Bands I. or III. of the television spectrum when transmitting on frequencies in the 144 Mc. Amateur band. Many arguments for and against v.f.o. control are heard, each of which has its points, but so far as the writer is concerned its use is confined to the convenience of shifting frequency in the event of another station operating on the chosen frequency.

In addition, by monitoring the band prior to switching on the transmitter, it can be set up on a clear channel, thus avoiding the necessity of purchasing a number of crystals in the hope of achieving the same result.

Finally, one has that sense of achievement which follows the design and construction of a v.f.o. for v.h.f. operation which is as stable as any of the lower frequency crystals used for controlling 144 Mc. transmitters and better than some of them, judging by reports from various stations on which the utmost reliance can be placed.

It seemed, therefore, that it would be better to start at some frequency which even at the worst would not produce a harmonic in television bands at all, and 72-73 Mc. was chosen for the following reasons:

- (a) No possibility of harmonics in band I.
- (b) No possibility of harmonics affecting i.f.s. of band I. or band III. receivers.
- (c) No possibility of a harmonic falling in band III. (Third harmonic above 216 Mc.)

The writer is indebted to G. W. Slack (G5KG) for suggesting the basic circuit of an oscillator which is reputed to have a high degree of stability. It is a twin triode push-pull circuit, very reminiscent of the multivibrator, and glories in the title Kalitron. It comprises very few components and is one of those delightful circuits which function not only in "breadboard" form, but repeats the performance when re-engineered for final use.

CONSTRUCTION

The assembly is mounted rigidly in a copper box, one end of which has a coaxial socket to which is connected a loop lying parallel to the cold end of the anode tank and about $\frac{1}{2}$ " away from it. Details of the box are given in Figs. 2 and 3. The constructor may have other ideas on the design of a suitable box, but the one described was composed of odd pieces of material which happened to be available.

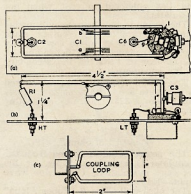


Fig. 3.—Diagram (a) shows a view of the underside of the top plate of the box, and (b) a side elevation. The coupling loop (c) is mounted approx. $\frac{1}{2}$ inch underneath the tuned circuit.

The various parts of the box are held together by PK self-tapping screws and the valve-holder, together with the feed-through by-pass capacitors, is mounted on the top plate (Fig. 3). All earth returns are made to this plate with the exception of the output link which is mounted on one end of the box as already described. The main point to bear in mind is rigid mounting of components with connecting wires

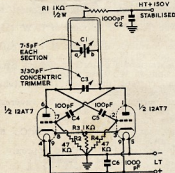


Fig. 1.—The circuit diagram of the Kalitron v.f.o.

For the purposes outlined above a maximum change of 100 Kc. either way is all that is necessary. The oscillator does, however, enable the whole of the two meter band to be covered.

In passing it should be mentioned that, prior to the construction of this v.f.o., a Clapp circuit with a fundamental frequency of 8 Mc. was in use which was in operation only when transmitting. This had one disadvantage, however, as with its attendant multipliers a harmonic reared its ugly head on 194 Mc. producing, of course, t.v.i. on Band III. The harmonic was suppressed to the satisfaction of the G.P.O. engineer but not to the complete satisfaction of the writer. A band III. t.v. set working in the shack with transmitting and band III. aerials ten feet apart showed slight traces of cross hatching although it was not discernible on a television set next door.

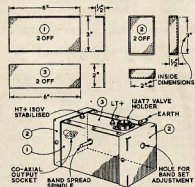


Fig. 2.—Details of the construction of the copper or brass box. The thickness of the material may lie between 16 and 22 s.w.g.

THE CIRCUIT

As will be seen from the circuit diagram (Fig. 1) the valve used in the prototype is a 12AT7. The cathodes are strapped and biased by a 1,000 ohm resistor which is not by-passed. This introduces negative feedback to assist stabilisation. The anode tank circuit comprises a hairpin loop of 10 s.w.g. silver-plated copper wire (part of an ex-Service inductance). The band-set capacitor is a Philips concentric trimmer of 3 to 30 pF. capacity and the bandspread capacitor a split-stator (also ex-Service) with two stator and two rotor plates in each section, giving an approximate capacity of 7.5 pF. per section. The condenser is connected midway along the hairpin inductance. The rotor is not earthed.

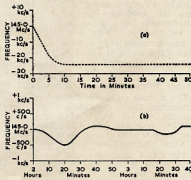


Fig. 4.—(a) Initial warm-up drift measured at 145 Mc. The ambient temperature varied between 65 and 70 degrees F. during the test. The h.t. supply was 150 volts stabilised by a VR150/30. (b) Variation in frequency after a two-hour run.

* Reprinted from R.S.G.B. "Bulletin," Sept. '58.

as short as possible between these and valve-holder contacts, etc.

The assembly of the items on the top plate is first completed, together with the bandsread capacitor. One side of the by is then fitted and the fixing screws inserted to fix the end plate of the capacitor. Then the base and re-

The maximum deviation is minus 500 cycles with no tendency to depart permanently from the set frequency, and could well have been due to slight variations in the voltage of the i.t. supply. In both instances the measurements were made on the second harmonic of the oscillator at 145 Mc.

BUFFER AMPLIFIER

The 72 Mc. oscillator is followed by a two-stage buffer amplifier. Mullard EF50s were used in the original but the constructor may use other types depending on the valves available. With 150 volts stabilised h.t. at 4 mA. on the v.f.o. and 285 volts at 20 mA. on the buffer stages, a drive of 2 mA. is available at the grid of a 5763, which is used as a doubler to 144 Mc.

The buffer amplifier follows normal practice for v.h.f. amplification and the actual circuit in use is shown in Fig. 5 together with a component layout sketch in Fig. 6. The frequency of the oscillator may be changed by at least 100 Kc. in either direction without necessitating retuning of the buffer circuits or loss of drive, but greater changes will call for readjustment of the tuned circuits of the amplifier. This slight disadvantage could, no doubt, be overcome by adding a further buffer amplifier stage and broad banding all tuned circuits but was not thought necessary for the writer's requirements.

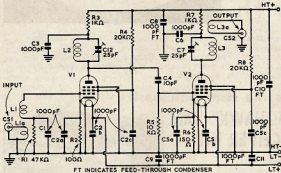


Fig. 5.—Circuit diagram of the buffer amplifier for use with the 72 Mc. Kallitron v.f.o. V1 and V2 are both EF50s. The physical layout used is shown in Fig. 6. The oscillator is connected to this unit by a short length of coaxial cable.

maining side and the ends are attached and the job is complete.

The connection for the h.t. negative and earthed side of the heater supply goes to a tag under one of the screws fixing the valve-holder, which should be p.t.f.e. for optimum results. A screening cap is provided for the valve. A slow motion drive will be required and it is recommended that this be coupled to the bandsread condenser by means of a flexible coupling.

FREQUENCY STABILITY

Some idea of the order of frequency stability to be expected from the oscillator is given by the graphs in Fig. 4, from which it will be seen that (graph a) the frequency remained substantially constant after rather less than ten minutes from a cold start, i.t. and h.t. having been applied together 20 seconds before observations commenced.

Graph (b), drawn to a much larger scale, shows the random variations in frequency noted during a period of one hour 45 minutes after the oscillator had been in operation for two hours.

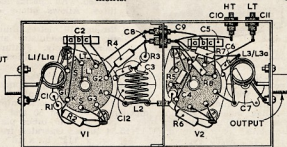
METEOR SHOWERS

For the information of those Amateurs interested in communication from meteor scatter propagation, we publish the names of the meteor showers and their times of occurrence during the year:

Quadrantids	Jan. 1-4
Cygnids	Jan. 17
Aurigids	Feb. 5-10
Bootids	March 10-12
Lyrids	April 18-25
May Aquarids	May 1-6
Herculids	May 11-24
Pegassids	May 30
Andromedids	June 2-20
Pons-Winnecke	June 27-30
Cygnids	July 14
Capricornids	July 16-20
Perseids	July 25-Aug. 4
Aquarids	July 28-31
Perseids	Aug. 10-14
Cygnids	Aug. 19-30
Dracnids	Aug. 21-31
Perseids	Sept. 7-15
Aurigids	Sept. 22
Quadrantids	Sept. 25
Giacobinids	Oct. 2
Arietids	Oct. 12-23
Orionids	Oct. 18-25
Taurids	Oct. 31-Nov. 6
Leonids	Nov. 14-18
Andromedids	Nov. 26-Dec. 4
Geminids	Dec. 10-13

The above information was taken from a lecture given to the VK3 V.h.f. Group by VK3ARY.

Fig. 6.—Layout of the INPUT buffer amplifier. The copper or brass chassis measures 5 in. by 3 in. and has a bottom cover plate.



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"MOHAWK" HAM RECEIVER KIT (RX-1)

This "de luxe" 15 tube communications receiver features double conversion with i.f.s. at 1682 kc. and 50 kc. Eight separately calibrated bands



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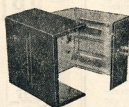
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MODULATOR DESIGN

(Continued from Page 2)

NOTES

It should be noted that the OC26 output transistors employed have a frequency cut-off of 4.5 kc. The phase shift and drop in α gives rise to a decline in transistor efficiency which causes an elevation of junction temperature. To help stabilise this run-away condition at the higher frequencies, a base leak of 12K ohms has been used with the OC26s. Nevertheless, when checking for maximum power output at frequencies above 1 kc. a current meter should be inserted in series with the supply for visual indication of run-away, and drive power only applied for a brief period.

There is not sufficient sustained high frequency power in normal speech to precipitate this form of instability and hence the performance of the modulator does not suffer as the power level in speech (even female) declines rapidly as the frequency increases above some 800 c.p.s. Similarly, the response of the carbon microphone falls rapidly above 2.5 kc. Nevertheless, as an added precaution when testing the modulator, an 0.47 μ F. condenser in parallel with the 50 ohm source impedance audio generator is recommended to synthesise the high frequency roll-off of the microphone.

After construction, the unit should be tested for proper operation by connecting a dummy load to the output of the modulation transformer and checking the variation whilst speaking into the microphone. Do not, under any circumstances, try to operate the unit without a load, as this may damage the output transistors. A modulation percentage test may be made when the modulator has been connected to the transmitter.

It is desirable to use an oscilloscope for this purpose in order to achieve the optimum setting for the pre-set volume control.

FOOTNOTE BY EDITOR

[In constructing a similar modulator it is suggested that the OC26 transistors be mounted on a heat sink of 16 gauge aluminium and at least 6" x 3" in size. The transistors require to be insulated from the heat sink using the mica washers and other mounting parts supplied.

Transformers suitable for the modulator are being manufactured by A. & R. Electronic Equipment Pty. Ltd., of Melbourne, and can be procured through their Distributors in all States.

The input transformer, Type IT631, is designed for use with a carbon microphone, the impedance of the primary being 50 ohms and secondary 1,500 ohms c.t. The core material is "Alphasil" grain oriented steel.

The modulation transformer, Type MT26, is provided with a 120 ohm c.t. primary and a secondary of 7,000 ohms, tapped at 4,000 ohms. This allows for typical operating conditions such as:—

Input to r.f. amplifier stage—
300 V., 75 mA., 22.5 W., 4,000 ohms.
320 V., 80 mA., 25.2 W., 4,000 ohms.
400 V., 57.5 mA., 23 W., 7,000 ohms.
420 V., 60 mA., 25.2 W., 7,000 ohms.

This transformer also incorporates a grain oriented core.—Editor.]

A V.F.O. FOR 9 Mc. S.S.B.

The author of this article, which appeared in Feb. '61 "A.R.", points out that the output circuit of the second 1625 tube can be much simplified, as shown in Fig. 1.

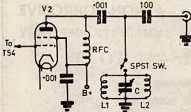


Fig. 1.

L1 tunes 16 to 20 Mc. (for 7 and 28 Mc.)
L2 tunes 12 Mc. for 21 Mc.)

For 3.5 and 14 Mc. operation, the switch is opened and 5 Mc. output is fed straight through—giving 9 Mc. s.s.b. minus 5.5 Mc., equals 3.5 Mc.; or 9 Mc. s.s.b. plus 5.3 Mc. equals 14.3 Mc.

For the other three bands close the switch and the capacitor, C, peaks the appropriate coil.

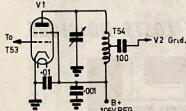


Fig. 2.

Unfortunately an error appears in the circuit shown at the bottom of page 5, Feb. '61 "A.R." The condensers C65 and C67 are grounded in the transmitter, so the circuit should be as shown in Fig. 2 herewith.

AMATEUR IN EXILE

Out in the garage, or under the shag rug of the kitchen table, or gathering dust on top of the transmitter rack, have you a copy of "Call Book Magazine" published in 1936, 1937, 1938, or 1939? If so, would you like to gladden the heart of an ex-SP? W. Nestorowicz, ex-SP1EG, would just about give his right arm to see in print the old call sign. You can contact him at 46 Rabaul Road, George's Hall, via Bankstown, N.S.W.

★

COMMONWEALTH TECHNICAL TRAINING WEEK

The Amateurs of Canterbury (England) are operating an Amateur Station during Commonwealth Technical Training Week (May 31 to June 3, 1961) and have requested, through the R.A.A.F. Radio Apprentice School, "Froggall", Canterbury (Victoria), for Australian Amateur Stations in the Canterbury (Melbourne) area to look out for the G station.

Commonwealth Technical Training Week is organising a technical hobbies exhibition in Canterbury (England) and the following G call will be transmitting from the Amateur station at exhibition site: G5QT, G3FUM, G3HTU and G3LIG.

Mr. D. J. Bradford, Secretary to the Exhibition Committee and himself a Bachelor of Science, informs us that the exhibition will be between the hours of 0900 and 1100 GMT, would see the most likely period for making contacts with VKs.

Mr. Bradford has been advised that there is also a Canterbury in Sydney, so VK2 please take note and look out for the G calls listed above.

Apart from the desire to make contact with "Canterbury Hams," the exhibition station will be pleased to contact any VK Amateurs.

★

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Vol Molesworth, VK2VO

THERE'S an old gag in Amateur Radio—"The gear looks an awful mess, but it works". A rather different approach is adopted by Vol Molesworth, VK2VO. He says his equipment looks good, even if it does not work very well.

Judging by the S9 signals Vol puts out on 40 and 2 metres, this is obviously a joke; but there is no doubt his shack has a "studio" appearance.

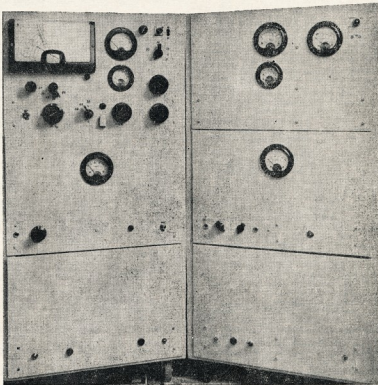
Vol lives in a three-story house in Jersey Road, Woollahra, in the eastern suburbs of Sydney. The whole of the top floor is devoted to his two main interests—study and radio.

One room is lined with books and is furnished with a couch, armchair, and desk. The other room is the "shack". It is painted out in duck-egg blue, with a canyon rose ceiling.

Along one wall runs the workbench, with pegboard backing to which tools and meters are conveniently clipped, and drawers below for storing components.

Along the other wall runs the storage and operating bench. This is masonite topped, and features doors each painted a different colour.

A photograph shows the "operating" end of this bench. Main receiver is an AMR300, on top of which sits the 2 metre converter and an 8" speaker. On the right of the receiver is a compass indicator and push buttons for remote control of the rotatable four-element 2 metre beam; on the left is a small 18½ watt 2 metre transmitter.



The two main transmitters, shown in the other photograph, are built in identical cabinets, with rubber feet for easy manoeuvrability. Each cabinet contains three compartments, the 18" x 12" front panels being sprayed grey.

On the left is the lower-bands transmitter, with a 4 Geloso six-band exciter driving an 807 buffer, driving a pair of 807s in parallel. Pi-coupled output is used to centre-fed dipoles on 40 or 20 metres. The centre compartment houses the modulator (a pair of 807s in AB2) and the lower one the power supplies.

On the right is the high-power 2 metre transmitter, crystal-locked, running a QQE06/40 with 75 volts of fixed bias. Beneath it is a modulator running a pair of 807s in AB1, with in-built tone oscillator, and on the bottom the power supplies.

Vol entered Amateur Radio in 1959 by way of the correspondence course offered by the N.S.W. Division of the W.I.A. After three months as VK2ZDD, he took out the full call sign.

A newspaperman for 20 years, Vol is now Publications Officer for the Electricity Commission of N.S.W. He holds a Master of Arts degree (in Logic) from the University of Sydney, and is a Councillor for VK2 Division.



THE NORTH COAST AND TABLELANDS (N.S.W.) ZONE CONVENTION

URUNGA, 1961

The thirteenth Annual N.C. & T. Zone Convention was held at Urunga during Easter week-end and was attended by 37 licensed Amateurs, six associates, and 14 XYLS, whilst several Amateurs passing through Urunga spent a few hours with us.

Notable among the visitors was our Divisional President, Bill 2YB and Councillor, Harold 2AAH. Don 3ALQ from Melbourne was again present, and Claude 4UX from Ayr paid a second visit and was accompanied by 4ZDG.

The full attendance list was as follows: Rod 2ACU, Noel 2AHH, Assoc. Norm Dash, Hugo 2WH and Jean, Don 2ASW, Graham 2ARR, Bob 2IN and Daphne, George 4GG, Claude 4UX, Bill 2AEY, Tas. 2GV, Col. 2ACK and Beryl, Ern 2FP and Muriel, Assoc. Norm Moody, Les 2RJ and Sylvia, John 2VT, Dale 4ZDG, Frank 2ACQ/P and Ethel, Bill 4WS and Hazel, Bob 2WQ, Assoc. Snow McCauley, Bob 2AFP, Major 2RU and Ruth, Bill 2XT, Ian 2AXI and Gillian, Rupert 2AUK and Loretta, Crieff 2XO and Jean, Lionel 2LS, Terry 2JS and Elsa, Brian 2ZCQ, Assoc. Fred Reid, Bill 2YB and Verna, Harold 2AAH, Jim 2PH and Edith, John 2ZBM, Ray 2SB, Mac 2ADV, Ken 2PY, Chris 2QS, Don 3ALQ, Norm Bartlett, Assoc. Dave Harding, Jack 2ADN.

The Convention commenced on the Friday night with a meeting chaired by the Zone Officer, 2AHH, who outlined the programme and then invited questions and discussions on subjects concerning the W.I.A. or Amateur Radio in general. Divisional President, Bill Lewis, answered a barrage of questions of various subjects including disposals, the Dural equipment, 14 Atcheson Street, and general policy matters, whilst Councillor Harold Burtoft gave an interesting address on transistors and outlined proposals for produced tapes and slides for use by country members.

It was very pleasing to have Bill and Harold present, for as the Convention is a W.I.A. function, it gave members an opportunity of discussing their various problems with them at first hand.

Even though the Convention is a regular W.I.A. function, and one may reasonably expect the Council to be represented, it was very pleasing to see Bill and Harold present, for besides enjoying their company, it gave members an opportunity of discussing Institute affairs at first hand with two of the seven charged with the management of our organisation. We trust they have returned to Sydney with a better knowledge of the requirements of country members, or perhaps judging by some of the remarks on Friday night, they may be more confused than ever, hi!

It is very difficult to recapitulate and put on paper the "atmosphere" of the Convention without writing a book.

Suffice it to say that everyone had a good time and will be coming next year if they are able. If you want to find out about the "doings," I suggest you talk it over with someone who attended. Ask about the demonstration of recording equipment by 2ARR—especially the "stutter" machine; ask 2SB what happened to the 3-ton truck he took up to his first floor flat in Kings Cross; ask Rod Pike where he spent Sunday night; ask Ruth Collett (XYL VK2RU) to take you for a row sometime. I could mention dozens of incidents but space just will not permit me.

The winners of the various competitions were presented with the prizes at a concert in the Urunga School of Arts Hall, after which the Progress Association provided an excellent supper. A sale of disposals equipment followed, and the evening concluded around the output end of a 9-gallon wave-guide.

Competition results were as follows:

144 Mc. Hidden Tx Hunt: 1st, Major VK2RU; 2nd, Noel VK2AHH.

Gerry Challenger 7 Mc. Hidden Tx: 1st, VK2PY, only one to arrive.

144 Mc. Hidden Tx: 1st, Les VK2RJ; 2nd, Noel VK2AHH.

Urunga Scramble: 1st, Don VK3ALQ; 2nd, Noel VK2AHH.

Longest Distance Travelled: Claude VK4UX.

Boat Race for Ladies: 1st, Mrs. VK-2PM; 2nd, Mrs. VK2RU.

Raffle: Transistors, VK2IN; Book, VK-2WH.

No Convention can possibly function without organisation and work by many people. Rod VK2ACU was the organiser and he was ably assisted by Crieff VK2XO, Brian VK2ZCQ, Fred Reid (Assoc.), and Jack VK2ADN, whilst Assoc. Norm Dash acted as Convention Registrar-Treasurer-Secretary, etc. Not to be forgotten are the efforts of Jean Retallick (XYL VK2XO) and Betty Pike (XYL VK2ACU) who did so much to entertain the ladies and among other jobs such as supper on the Saturday night. Thanks are also due to many local people and organisations for the co-operation they always readily extend to us.

The Urunga Go-Kart Club was good enough to allow us to drive their karts and what a sight it was! They tell me Bill Lewis is going to hand in his driver's license after his experience on the go-karts!

Our thanks are also due to the Ducon Condenser Co. for making samples of their products available to members.

The Urunga Convention next year will be bigger and better than ever before, so keep your eye on these pages and your ear on VK2WI for further news.

—N. A. Hanson, VK2AHH, Zone Officer.

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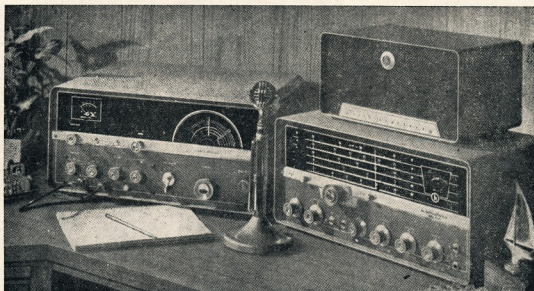
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TRANSMITTER HT37 Completely self contained, in-built power supply fully regulated, built-in voice operation, built-in extremely stable v.f.o. The v.f.o. is gear driven and is direct reading on large dial. Pi output. Direct output reading meter, t.v.i. proofed, unwanted sideband 40 db. down, carrier 50 db. down, all operation modes are changed by one switch—no other adjustment needed, band switch and two tuning controls only for changing bands. We think that this transmitter is the finest and most versatile unit of its kind available anywhere in the world today.

RECEIVER SX111 Selectable sideband receiver, double conversion, 1st i.f. 1650 kc., 2nd i.f. 50 kc., xtal locked for upper or lower sideband, variable selectivity 500 c.p.s. to 5 kc. in five steps. The notch filter for rejecting unwanted signals, extra band for xtal locked 144 Mc. or 50 Mc. converters, 500 kc. marker calibrator, large slide-rule, gear-driven dial, variable dial calibration from front panel. All oscillator coils on ceramic formers, all oscillators temperature compensated with ceramic capacitors. High signal-to-noise ratio, extreme stability. This receiver can be also supplied as a general coverage unit (SX100). Both units are grey steel and black with brush chrome trim.

Price F.O.B. Sydney: **Transmitter HT37 £346/11/7**

Tax included **Receiver SX111 - - £236/8/5**

W.F.S. ELECTRONIC SUPPLY CO.

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DX

John C. Pinnell, VK2ZR

15 Summit Avenue,
Earlwood, N.S.W.
Phone: UW 4248.

I find it necessary for me to give up intensive DX-ing after being very active for over six years. The information in these notes has been collected from those who have so willingly helped me for well over two years. To them I wish to say "thank you."

As things are at present and beyond my control, it will be impossible for me to be on the air much during the next 12 months. Also, I will be away from home from time to time which will make it impossible for me to continue writing these notes for this page.

I will write the notes for next month (June) and would appreciate any news you may have for that issue.

NEWS AND NOTES

France José Land is expected to be on the air at any time now using the call UA1KRD. Tuva in Zone 23 has the following active c.w. stations: UAOKYA, UAQYQ, UAQYD, UAQYE. The recent DXCC expedition from Moscow made nearly 1200 contacts and so made it possible for several to complete their W.A.Z. with this mode of transmission.

If you worked AP2F located in Peshawar, Pakistan, between 22. 1948, and April 10, 1949, or the same operator when in China and Korea within the same time period, confirmation may now be obtained from VE8BWY (214 Delaware Ave., Toronto 4, Ontario, Canada).

At the present time there is no Ham activity in the Chagos Islands, but VQ8BC is planning to be there in about four months time. HC1UJ in Ecuador is anxious to make 80 mc. c.w. operation. He operates near the edge of the band and can often be found around 9000 GMT. He is an old-timer and has not used this band since 1935.

FR8AU is on s.b. with a pair of 81ls in the final. He operates on 14300 kc. His call may possibly be changed to 6V8AU in the near future. Two other operators, FF8CK and FF8CQ, are building 50 mc. rigs.

CP3EA is active on s.b. on or near 14310 and 14340. W.A.Z. mail is being sent to him (Box 64, Woodstock, Mass.). It is almost impossible to get cards direct as I.R.C.'s are not acceptable in Bolivia and mails generally unreliable.

EA3BA, Canary Islands, is now active every day except Sundays from 1300 to 1300z on about 14320.

9U5MC, Ruanda-Drundi, is active almost every day at about 1800z and Saturdays for most of the day.

It is understood that Danny Weil is now planning to resume his round-the-world cruise. 9N3PM is with the Hillary expedition in the Himalaya Mountains. His main concern is to keep in contact with their main base in Nepal. It is reported that he will make DX contacts whenever possible.

The planned DX-pedition to the Galapagos Islands has been postponed until either the last two weeks of May or the first two weeks of June.

Antarctic Expedition. For two or three weeks in June there will be another expedition on the ice field, operating from Wilkes Base, Antarctica. Operating will be done on 7 Mc. with a v.f.o. and using the call sign WOTC. It will not be used for any other operation. It is requested that anybody even hears them, a report be sent to KQ3QG for QSP.

Japanese amateurs of Okinawa are now being issued their own Amateur operating and station licenses with their own prefix, KR8. The first such license, KR8AB, has already been issued.

The A.R.R.L. have added Bajo Nuevo to the DXCC country list. Confirmations for contacts must be dated after Nov. 15, 1948. Dan Weil operated HK0AA from this tiny island in the Caribbean.

Your boy ones on s.b.: UA2AO, Kalingrad; ZB2AD, Gibraltar; LA1NG-P, Jan Mayen; and SV0VO, Crete.

PY1CK hopes to make a trip to Saint Peter and Paul Islands in September. PY42Z will probably go along with him.

z zero time-GMT.

ZAB2AK, his brother ZA2BOR, and ZA2KC are all active from Albania. I.R.C.'s will bring the cards direct.

Some W/4 Hams are planning a trip to Swan Island in the beginning of July. There is a possibility of SM2DP and SM2-S joining the party. The call sign will be KS4BC.

A recent new call to appear on the air is VK3AGO—the XVI license of which is from U.S.A., being a daughter of W8WVR. Her name is Lorrie Gardiner and she lives in an outer suburb of Melbourne with an Aussie son and two Aussie-born children. VK3AGO uses a DX-100 and an HQ130 rx connected to a two wavelength vee antenna. Lorrie generally operates on 14 Mc. and has a 14300 and 14340 c.w. and ph. rig. W8WVR each week-end from 1100 GMT. She did a "W.I.A." course for her ticket during 1960.

ACTIVITIES

Col VK3AQW found conditions to be very poor, with the bands changing rapidly from fair to no good at all. Over the past few weeks best results have been obtained by pointing the quad south-east and operating mostly between 6700 and 9000. W land has been concurred by its contacts. VK3AQW is from Blue Mountains, on 14 Mc. c.w. he worked: DL1ANQ, EA2DJ, DJ4TE, EA4BQ, G3AAM, G3CJ, G3DQ, G3HJ, G3KJ, G3LJ, G3MJ, G3ND, G3PD, G3RD, G3SD, G3TD, G3UD, G3VJ, G3WJ, G3XJ, G3YJ, G3ZJ, G3AA, G3AB, G3AC, G3AD, G3AE, G3AF, G3AG, G3AH, G3AI, G3AJ, G3AK, G3AL, G3AM, G3AN, G3AO, G3AP, G3AQ, G3AR, G3AS, G3AT, G3AU, G3AV, G3AW, G3AX, G3AY, G3AZ, G3BA, G3BB, G3BC, G3BD, G3BE, G3BF, G3BG, G3BH, G3BI, G3BJ, G3BK, G3BL, G3BM, G3BN, G3BO, G3BP, G3BQ, G3BR, G3BS, G3BT, G3BU, G3BV, G3BW, G3BX, G3BY, G3BZ, G3CA, G3CB, G3CC, G3CD, G3CE, G3CF, G3CG, G3CH, G3CI, G3CJ, G3CK, G3CL, G3CM, G3CN, G3CO, G3CP, G3CQ, G3CR, G3CS, G3CT, G3CU, G3CV, G3CW, G3CX, G3CY, G3CZ, G3DA, G3DB, G3DC, G3DD, G3DE, G3DF, G3DG, G3DH, G3DI, G3DJ, G3DK, G3DL, G3DM, G3DN, G3DO, G3DP, G3DQ, G3DR, G3DS, G3DT, G3DU, G3DV, G3DW, G3DX, G3DY, G3DZ, G3EA, G3EB, G3EC, G3ED, G3EE, G3EF, G3EG, G3EH, G3EI, G3EJ, G3EK, G3EL, G3EM, G3EN, G3EO, G3EP, G3EQ, G3ER, G3ES, G3ET, G3EU, G3EV, G3EW, G3EX, G3EY, G3EZ, G3FA, G3FB, G3FC, G3FD, G3FE, G3FF, G3FG, G3FH, G3FI, G3FJ, G3FK, G3FL, G3FM, G3FN, G3FO, G3FP, G3FQ, G3FR, G3FS, G3FT, G3FU, G3FV, G3FW, G3FX, G3FY, G3FZ, G3GA, G3GB, G3GC, G3GD, G3GE, G3GF, G3GG, G3GH, G3GI, G3GJ, G3GK, G3GL, G3GM, G3GN, G3GO, G3GP, G3GQ, G3GR, G3GS, G3GT, G3GU, G3GV, G3GW, G3GX, G3GY, G3GZ, G3HA, G3HB, G3HC, G3HD, G3HE, G3HF, G3HG, G3HH, G3HI, G3HJ, G3HK, G3HL, G3HM, G3HN, G3HO, G3HP, G3HQ, G3HR, G3HS, G3HT, G3HU, G3HV, G3HW, G3HX, G3HY, G3HZ, G3IA, G3IB, G3IC, G3ID, G3IE, G3IF, G3IG, G3IH, G3II, G3IJ, G3IK, G3IL, G3IM, G3IN, G3IO, G3IP, G3IQ, G3IR, G3IS, G3IT, G3IU, G3IV, G3IW, G3IX, G3IY, G3IZ, G3JA, G3JB, G3JC, G3JD, G3JE, G3JF, G3JG, G3JH, G3JI, G3JJ, G3JK, G3JL, G3JM, G3JN, G3JO, G3JP, G3JQ, G3JR, G3JS, G3JT, G3JU, G3JV, G3JW, G3JX, G3JY, G3JZ, G3KA, G3KB, G3KC, G3KD, G3KE, G3KF, G3KG, G3KH, G3KI, G3KJ, G3KL, G3KM, G3KN, G3KO, G3KP, G3KQ, G3KR, G3KS, G3KT, G3KU, G3KV, G3KW, G3KX, G3KY, G3KZ, G3LA, G3LB, G3LC, G3LD, G3LE, G3LF, G3LG, G3LH, G3LI, G3LJ, G3LK, G3LL, G3LM, G3LN, G3LO, G3LP, G3LQ, G3LR, G3LS, G3LT, G3LU, G3LV, G3LW, G3LX, G3LY, G3LZ, G3MA, G3MB, G3MC, G3MD, G3ME, G3MF, G3MG, G3MH, G3MI, G3MJ, G3MK, G3ML, G3MN, G3MO, G3MP, G3MQ, G3MR, G3MS, G3MT, G3MU, G3MV, G3MW, G3MX, G3MY, G3MZ, G3NA, G3NB, G3NC, G3ND, G3NE, G3NF, G3NG, G3NH, G3NI, G3NJ, G3NK, G3NL, G3NM, G3NO, G3NP, G3NQ, G3NR, G3NS, G3NT, G3NU, G3NV, G3NW, G3NX, G3NY, G3NZ, G3OA, G3OB, G3OC, G3OD, G3OE, G3OF, G3OG, G3OH, G3OI, G3OJ, G3OK, G3OL, G3OM, G3ON, G3OO, G3OP, G3OQ, G3OR, G3OS, G3OT, G3OU, G3OV, G3OW, G3OX, G3OY, G3OZ, G3PA, G3PB, G3PC, G3PD, G3PE, G3PF, G3PG, G3PH, G3PI, G3PJ, G3PK, G3PL, G3PM, G3PN, G3PO, G3PP, G3PQ, G3PR, G3PS, G3PT, G3PU, G3PV, G3PW, G3PX, G3PY, G3PZ, G3QA, G3QB, G3QC, G3QD, G3QE, G3QF, G3QG, G3QH, G3QI, G3QJ, G3QK, G3QL, G3QM, G3QN, G3QO, G3QP, G3QQ, G3QR, G3QS, G3QT, G3QU, G3QV, G3QW, G3QX, G3QY, G3QZ, G3RA, G3RB, G3RC, G3RD, G3RE, G3RF, G3RG, G3RH, G3RI, G3RJ, G3RK, G3RL, G3RM, G3RN, G3RO, G3RP, G3RQ, G3RR, G3RS, G3RT, G3RU, G3RV, G3RW, G3RX, G3RY, G3RZ, G3SA, G3SB, G3SC, G3SD, G3SE, G3SF, G3SG, G3SH, G3SI, G3SJ, G3SK, G3SL, G3SM, G3SN, G3SO, G3SP, G3SQ, G3SR, G3SS, G3ST, G3SU, G3SV, G3SW, G3SX, G3SY, G3SZ, G3TA, G3TB, G3TC, G3TD, G3TE, G3TF, G3TG, G3TH, G3TI, G3TJ, G3TK, G3TL, G3TM, G3TN, G3TO, G3TP, G3TQ, G3TR, G3TS, G3TT, G3TU, G3TV, G3TW, G3TX, G3TY, G3TZ, G3UA, G3UB, G3UC, G3UD, G3UE, G3UF, G3UG, G3UH, G3UI, G3UJ, G3UK, G3UL, G3UM, G3UN, G3UO, G3UP, G3UQ, G3UR, G3US, G3UT, G3UU, G3UV, G3UW, G3UX, G3UY, G3UZ, G3VA, G3VB, G3VC, G3VD, G3VE, G3VF, G3VG, G3VH, G3VI, G3VJ, G3VK, G3VL, G3VM, G3VN, G3VO, G3VP, G3VQ, G3VR, G3VS, G3VT, G3VU, G3VV, G3VW, G3VX, G3VY, G3VZ, G3WA, G3WB, G3WC, G3WD, G3WE, G3WF, G3WG, G3WH, G3WI, G3WJ, G3WK, G3WL, G3WM, G3WN, G3WO, G3WP, G3WQ, G3WR, G3WS, G3WT, G3WU, G3WV, G3WW, G3WX, G3WY, G3WZ, G3XA, G3XB, G3XC, G3XD, G3XE, G3XF, G3XG, G3XH, G3XI, G3XJ, G3XL, G3XM, G3XN, G3XO, G3XP, G3XQ, G3XR, G3XS, G3XT, G3XU, G3XV, G3XW, G3XX, G3XY, G3XZ, G3YA, G3YB, G3YC, G3YD, G3YE, G3YF, G3YG, G3YH, G3YI, G3YJ, G3YK, G3YL, 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G3EW, G3EX, G3EY, G3EZ, G3FA, G3FB, G3FC, G3FD, G3FE, G3FF, G3FG, G3FH, G3FI, G3FJ, G3FK, G3FL, G3FM, G3FN, G3FO, G3FP, G3FQ, G3FR, G3FS, G3FT, G3FU, G3FV, G3FW, G3FX, G3FY, G3FZ, G3GA, G3GB, G3GC, G3GD, G3GE, G3GF, G3GG, G3GH, G3GI, G3GJ, G3GK, G3GL, G3GM, G3GN, G3GO, G3GP, G3GQ, G3GR, G3GS, G3GT, G3GU, G3GV, G3GW, G3GX, G3GY, G3GZ, G3HA, G3HB, G3HC, G3HD, G3HE, G3HF, G3HG, G3HH, G3HI, G3HJ, G3HK, G3HL, G3HM, G3HN, G3HO, G3HP, G3HQ, G3HR, G3HS, G3HT, G3HU, G3HV, G3HW, G3HX, G3HY, G3HZ, G3IA, G3IB, G3IC, G3ID, G3IE, G3IF, G3IG, G3IH, G3II, G3IJ, G3IK, G3IL, G3IM, G3IN, G3IO, G3IP, G3IQ, G3IR, G3IS, G3IT, G3IU, G3IV, G3IW, G3IX, G3IY, G3IZ, G3JA, G3JB, G3JC, G3JD, G3JE, G3JF, G3JG, G3JH, G3JI, G3JJ, G3JK, G3JL, G3JM, G3JN, G3JO, G3JP, G3JQ, G3JR, G3JS, G3JT, G3JU, G3JV, G3JW, G3JX, G3JY, G3JZ, G3KA, G3KB, G3KC, G3KD, G3KE, G3KF, G3KG, G3KH, G3KI, G3KJ, G3KL, G3KM, G3KN, G3KO, G3KP, G3KQ, G3KR, G3KS, G3KT, G3KU, G3KV, G3KW, G3KX, G3KY, G3KZ, G3LA, G3LB, G3LC, G3LD, G3LE, G3LF, G3LG, 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G3RT, G3RU, G3RV, G3RW, G3RX, G3RY, G3RZ, G3SA, G3SB, G3SC, G3SD, G3SE, G3SF, G3SG, G3SH, G3SI, G3SJ, G3SK, G3SL, G3SM, G3SN, G3SO, G3SP, G3SQ, G3SR, G3SS, G3ST, G3SU, G3SV, G3SW, G3SX, G3SY, G3SZ, G3TA, G3TB, G3TC, G3TD, G3TE, G3TF, G3TG, G3TH, G3TI, G3TJ, G3TK, G3TL, G3TM, G3TN, G3TO, G3TP, G3TQ, G3TR, G3TS, G3TT, G3TU, G3TV, G3TW, G3TX, G3TY, G3TZ, G3UA, G3UB, G3UC, G3UD, G3UE, G3UF, G3UG, G3UH, G3UI, G3UJ, G3UK, G3UL, G3UM, G3UN, G3UO, G3UP, G3UQ, G3UR, G3US, G3UT, G3UU, G3UV, G3UW, G3UX, G3UY, G3UZ, G3VA, G3VB, G3VC, G3VD, G3VE, G3VF, G3VG, G3VH, G3VI, G3VJ, G3VK, G3VL, G3VM, G3VN, G3VO, G3VP, G3VQ, G3VR, G3VS, G3VT, G3VU, G3VV, G3VW, G3VX, G3VY, G3VZ, G3WA, G3WB, G3WC, G3WD, G3WE, G3WF, G3WG, G3WH, G3WI, G3WJ, G3WK, G3WL, G3WM, G3WN, G3WO, G3WP, G3WQ, G3WR, G3WS, G3WT, G3WU, G3WV, G3WW, G3WX, G3WY, G3WZ, G3XA, G3XB, G3XC, G3XD, G3XE, G3XF, G3XG, G3XH, G3XI, G3XJ, G3XL, G3XM, G3XN, G3XO, G3XP, G3XQ, G3XR, G3XS, G3XT, G3XU, G3XV, G3XW, G3XX, G3XY, G3XZ, G3YA, G3YB, G3YC, G3YD, G3YE, G3YF, G3YG, G3YH, G3YI, G3YJ, G3YK, G3YL, G3YM, G3YN, G3YO, G3YP, G3YQ, G3YR, G3YS, G3YT, G3YU, G3YV, G3YW, G3YX, G3YZ, G3ZA, G3ZB, G3ZC, G3ZD, G3ZE, G3ZF, G3ZG, G3ZH, G3ZI, G3ZJ, G3ZK, G3ZL, G3ZM, G3ZN, G3ZO, G3ZP, G3ZQ, G3ZR, G3ZS, G3ZT, G3ZU, G3ZV, G3ZW, G3ZX, G3ZY, G3ZZ, G3AA, G3AB, G3AC, G3AD, G3AE, G3AF, G3AG, G3AH, G3AI, G3AJ, G3AK, G3AL, G3AM, G3AN, G3AO, G3AP, G3AQ, G3AR, G3AS, G3AT, G3AU, G3AV, G3AW, G3AX, G3AY, G3AZ, G3BA, G3BB, G3BC, G3BD, G3BE, G3BF, G3BG, G3BH, G3BI, G3BJ, G3BK, G3BL, G3BM, G3BN, G3BO, G3BP, G3BQ, G3BR, G3BS, G3BT, G3BU, G3BV, G3BW, G3BX, G3BY, G3BZ, G3CA, G3CB, G3CC, G3CD, G3CE, G3CF, G3CG, G3CH, G3CI, G3CJ, G3CK, G3CL, G3CM, G3CN, G3CO, G3CP, G3CQ, G3CR, G3CS, G3CT, G3CU, G3CV, G3CW, G3CX, G3CY, G3CZ, G3DA, G3DB, G3DC, G3DD, G3DE, G3DF, G3DG, G3DH, G3DI, G3DJ, G3DK, G3DL, G3DM, G3DN, G3DO, G3DP, G3DQ, G3DR, G3DS, G3DT, G3DU, G3DV, G3DW, G3DX, G3DY, G3DZ, G3EA, G3EB, G3EC, G3ED, G3EE, G3EF, G3EG, G3EH, G3EI, G3EJ, G3EK, G3EL, G3EM, G3EN, G3EO, G3EP, G3EQ, G3ER, G3ES, G3ET, G3EU, G3EV, G3EW, G3EX, G3EY, G3EZ, G3FA, G3FB, G3FC, G3FD, G3FE, G3FF, G3FG, G3FH, G3FI, G3FJ, G3FK, G3FL, G3FM, G3FN, G3FO, G3FP, G3FQ, G3FR, G3FS, G3FT, G3FU, G3FV, G3FW, G3FX, G3FY, G3FZ, G3GA, G3GB, G3GC, G3GD, G3GE, G3GF, G3GG, G3GH, G3GI, G3GJ, G3GK, G3GL, G3GM, G3GN, G3GO, G3GP, G3GQ, G3GR, G3GS, G3GT, G3GU, G3GV, G3GW, G3GX, G3GY, G3GZ, G3HA, G3HB, G3HC, G3HD, G3HE, G3HF, G3HG, G3HH, G3HI, G3HJ, G3HK, G3HL, G3HM, G3HN, G3HO, G3HP, G3HQ, G3HR, G3HS, G3HT, G3HU, G3HV, G3HW, G3HX, G3HY, G3HZ, G3IA, G3IB, G3IC, G3ID, G3IE, G3IF, G3IG, G3IH, G3II, G3IJ, G3IK, G3IL, G3IM, G3IN, G3IO, G3IP, G3IQ, G3IR, G3IS, G3IT, G3IU, G3IV, G3IW, G3IX, G3IY, G3IZ, G3JA, G3JB, G3JC, G3JD, G3JE, G3JF, G3JG, G3JH, G3JI, G3JJ, G3JK, G3JL, G3JM, G3JN, G3JO, G3JP, G3JQ, G3JR, G3JS, G3JT, G3JU, G3JV, G3JW, G3JX, G3JY, G3JZ, G3KA, G3KB, G3KC, G3KD, G3KE, G3KF, G3KG, G3KH, G3KI, G3KJ, G3KL, G3KM, G3KN, G3KO, G3KP, G3KQ, G3KR, G3KS, G3KT, G3KU, G3KV, G3KW, G3KX, G3KY, G3KZ, 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G3RM, G3RN, G3RO, G3RP, G3RQ, G3RR, G3RS, G3RT, G3RU, G3RV, G3RW, G3RX, G3RY, G3RZ, G3SA, G3SB, G3SC, G3SD, G3SE, G3SF, G3SG, G3SH, G3SI, G3SJ, G3SK, G3SL, G3SM, G3SN, G3SO, G3SP, G3SQ, G3SR, G3SS, G3ST, G3SU, G3SV, G3SW, G3SX, G3SY, G3SZ, G3TA, G3TB, G3TC, G3TD, G3TE, G3TF, G3TG, G3TH, G3TI, G3TJ, G3TK, G3TL, G3TM, G3TN, G3TO, G3TP, G3TQ, G3TR, G3TS, G3TT, G3TU, G3TV, G3TW, G3TX, G3TY, G3TZ, G3UA, G3UB, G3UC, G3UD, G3UE, G3UF, G3UG, G3UH, G3UI, G3UJ, G3UK, G3UL, G3UM, G3UN, G3UO, G3UP, G3UQ, G3UR, G3US, G3UT, G3UU, G3UV, G3UW, G3UX, G3UY, G3UZ, G3VA, G3VB, G3VC, G3VD, G3VE, G3VF, G3VG, G3VH, G3VI, G3VJ, G3VK, G3VL, G3VM, G3VN, G3VO, G3VP, G3VQ, G3VR, G3VS, G3VT, G3VU, G3VV, G3VW, G3VX, G3VY, G3VZ, G3WA, G3WB, G3WC, G3WD, G3WE, G3WF, G3WG, G3WH, G3WI, G3WJ, G3WK, G3WL, G3WM, G3WN, G3WO, G3WP, G3WQ, G3WR, G3WS, G3WT, G3WU, G3WV, G3WW, G3WX, G3WY, G3WZ, G3XA, G3XB, G3XC, G3XD, G3XE, G3XF, G3XG, G3XH, G3XI, G3XJ, G3XL, G3XM, G3XN, G3XO, G3XP, G3XQ, G3XR, G3XS, G3XT, G3XU, G3XV, G3XW, 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G3EI, G3EJ, G3EK, G3EL, G3EM, G3EN, G3EO, G3EP, G3EQ, G3ER, G3ES, G3ET, G3EU, G3EV, G3EW, G3EX, G3EY, G3EZ, G3FA, G3FB, G3FC, G3FD, G3FE, G3FF, G3FG, G3FH, G3FI, G3FJ, G3FK, G3FL, G3FM, G3FN, G3FO, G3FP, G3FQ, G3FR, G3FS, G3FT, G3FU, G3FV, G3FW, G3FX, G3FY, G3FZ, G3GA, G3GB, G3GC, G3GD, G3GE, G3GF, G3GG, G3GH, G3GI, G3GJ, G3GK, G3GL, G3GM, G3GN, G3GO, G3GP, G3GQ, G3GR, G3GS, G3GT, G3GU, G3GV, G3GW, G3GX, G3GY, G3GZ, G3HA, G3HB, G3HC, G3HD, G3HE, G3HF, G3HG, G3HH, G3HI, G3HJ, G3HK, G3HL, G3HM, G3HN, G3HO, G3HP, G3HQ, G3HR, G3HS, G3HT, G3HU, G3HV, G3HW, G3HX, G3HY, G3HZ, G3IA, G3IB, G3IC, G3ID, G3IE, G3IF, G3IG, G3IH, G3II, G3IJ, G3IK, G3IL, G3IM, G3IN, G3IO, G3IP, G3IQ, G3IR, G3IS, G3IT, G3IU, G3IV, G3IW, G3IX, G3IY, G3IZ, G3JA, G3JB, G3JC, G3JD, G3JE, G3JF, G3JG, G3JH, G3JI, G3JJ, G3JK, G3JL, G3JM, G3JN, G3JO, G3JP, G3JQ, G3JR, G3JS, G3JT, G3JU, G3JV, G3JW, G3JX, G3JY, G3JZ, G3KA, G3KB, G3KC, G3KD, G3KE, G3KF, G3KG, G3KH, G3KI, G3KJ, G3KL, G3KM, G3KN, G3KO, G3KP, G3KQ, G3KR, G3KS, G3KT, G3KU, G3KV, G3KW, G3KX, G3KY, G3KZ, G3LA, G3LB, G3LC, G3LD, G3LE, G3LF, G3LG, G3LH, G3LI, G3LJ, G3LK, G3LL, G3LM, G3LN, G3LO, G3LP, G3LQ, G3LR, G3LS, G3LT, G3LU, G3LV, G3LW, G3LX, G3LY, G3LZ, G3MA, G3MB, G3MC, G3MD, G3ME, G3MF, G3MG, G3MH, G3MI, G3MJ, G3MK, G3ML, G3MN, G3MO, G3MP, G3MQ, G3MR, G3MS, G3MT, G3MU, G3MV, G3MW, G3MX, G3MY, G3MZ, G3NA, G3NB, G3NC, G3ND, G3NE, G3NF, G3NG, G3NH, G3NI, G3NJ, G3NK, G3NL, G3NM, G3NO, G3NP, G3NQ, G3NR, G3NS, G3NT, G3NU, G3NV, G3NW, G3NX, G3NY, G3NZ, G3OA, G3OB, G3OC, G3OD, G3OE, G3OF, G3OG, G3OH, G3OI, G3OJ, G3OK, G3OL, G3OM, G3ON, G3OO, G3OP, G3OQ, G3OR, G3OS, G3OT, G3OU, G3OV, G3OW, G3OX, G3OY, G3OZ, G3PA, G3PB, G3PC,

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THIS MONTH'S SPECIALS

Type	Kc.	Type	Kc.	Type	Kc.	Type	Kc.	Type	Kc.	Type	Kc.	Type	Kc.	Type	Kc.	Type	Kc.
DC 1985	DC 3536	L 4742.5	DC 5530	FT 6106.66	LP 6522	FT 7275		DC 2007.5	AWA3545	L 4750	FT 5535	LP 6110	LP 6525	FT 7375			
FT 2070	L 3600	FT 4765	L 5551.5	FT 6125	LP 6547	FT 7425		FT 2075	FT 3650	FT 4780	FT 5552.5	LP 6130	DC 6550	LP 7450			
2085	FT 3840	FT 4815	DC 5590	FT 6173.33	DC 6561	FT 7611		2096.25	FT 3885	FT 4840	FT 5635	FT 6175	DC 6572	DC 7680			
AWA2103.1		FT 4852.5	FT 5660	LP 6187	DC 6572	DC 7700		FT 2260	FT 4025	L 4870	FT 5665	LP 6210	LP 6583	FT 7750			
DC 2336.4	FT 4035	L 4880	DC 5700	FT 6225	LP 6640	DC 7810		DC 2338	FT 4080	FT 4895	FT 5706	FT 6235	DC 6650	DC 7890			
DC 2338	L 4096	FT 4930	DC 5710	LP 6235	FT 6650	LP 7890		DC 2338.05	FT 4124	FT 4950	DC 5710	DC 6240	DC 6700	DC 7920			
DC 2368	FT 4240	FT 4965	FT 5725	DC 6243	LP 6700	DC 7925		AWA2442.5	FT 4255	FT 4995	FT 5740	LP 6243	DC 6750	DC 7925			
DC 2595	FT 4280		FT 5744	LP 6317	DC 6783	DC 7930		DC 2665	L 4285	AWA5161.6	DC 5770	FT 6333.3	FT 6900	LP 7930			
AWA3030	FT 4360	DC 5170	FT 5773	DC 6350	LP 6910	DC 7997		DC 3065	L 4396.7	FT 5205	FT 5780	LP 6350	LP 6940	LP 8060			
FT 3184	FT 4397.5	DC 5210	FT 5782.5	FT 6373.33	FT 6960			FT 3195	FT 4397.5	FT 5245	DC 5810	FT 6375	LP 8126	DC 8126			
DC 3266.25	FT 4445	AWA5280	FT 5815	FT 6400.000	LP 7010	DC 8161		DC 3287.5	FT 4490	DC 5285	DC 5840	FT 6406.607	LP 7060	LP 8171			
DC 3313.5	DC 4495	FT 5295	FT 5850	DC 6420	DC 7062	DC 8176		L 3320	FT 4495	FT 5327.5	FT 5855	DC 6423	FT 7077	DC 8182			
DC 3332.5	FT 4520	FT 5360	L 5897.5	FT 6440	DC 7120	LP 8195		FT 3340	FT 4540	FT 5365	FT 5910	DC 6450	LP 7120	FT 8270			
DC 3432.5	DC 4549.44	FT 5397	L 5910	DC 6450	LP 7130	DC 8284		L 3440	FT 4550	DC 5410	FT 5920	LP 6450	DC 7200	DC 8350			
AWA3450	FT 4620	FT 5410	DC 5950	LP 6470	FT 7200	FT 8353		DC 3460.5	DC 4660	FT 5435		FT 6473.333	LP 7250	DC 8392			
L 3467.5	FT 4672.76	FT 5437.5	DC 6032	LP 6480	DC 7270	DC 8440		DC 3488.5	FT 4735	DC 5515		FT 6506.607	LP 7270	DC 8530			

SCR522 Transceivers: 100 to 150 Mc. complete with valves includ. 832s, good condition, to clear—£5. 5/- pack. fee.

SCR522 28v. Genemotor power supply, 20/-, 5 packing charge.

T1154 Transmitters. Complete with valves and meters. Good condition. Few only. 45/-, 5/- packing charge.

AR7 Communications Receivers. 140 Kc. to 25 Mc., includ. carrying case, power supply and coil boxes. Few only. To clear, £25. Packing charge 10/-.

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Test Meters. 0-1 mA. in case with plug and cord (for SCR522). £2.

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0-1 mA., 1 1/2" square, KM-17 £2

0-1 mA., 3 1/4" round, MR-65 £1/15/0

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Correspondence

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

Editor "A.R." Dear Sir,

I enjoyed the description of the AFDR1 in April "A.R.", however realising that it is the fashion nowadays for manufacturers to let the customer, the product, have decided to wait for "next year's model" before placing my order.

Also in April "A.R." was a statement made by the "portly gentleman" to the effect that the yearly fee for an Amateur Station licence could not be paid at any Post Office. If this was made in an attempt to outstep the Publications Committee, then it was done in very poor taste.

In actual fact I have paid my fee locally several times and I have been advised by the appropriate authorities that payment can be made at any money order office.

I believe that coloured trousers have been suggested for men in the latest fashion trends overseas. No doubt these will also include "rose petal pink".

—Max Riles, VK2ARZ.

MOBILE STATIONS—BEWARE!

Editor "A.R." Dear Sir,

I would like to draw the attention of all Radio Amateurs to a rather serious problem which I have come across recently. It concerns chiefly mobile stations whose ranks are mounting daily and it was while I was operating 40 mhz mobile recently during my annual vacation, that this potential danger impressed itself upon me.

It concerns the use of electric blasting caps as a means of starting a car. The hazard is found most commonly along main roads and highways where road works, etc., are in operation and where more Amateur mobile operators are likely to be found.

In N.S.W. it is customary for road signs to be exhibited in the vicinity of road works where blasting is being used and the state "BLASTING—SWITCH ALL RADIO TRANSMITTERS OFF." Piqued by one of these signs, I enquired of the Dept. of Main Roads and was very particular. They referred me to an article published in "The Explosives Engineer", of Sept-Oct., 1961, wherein this matter is discussed rather fully and I would like to quote some of the relevant passages in order to familiarise Amateurs with the problem and so avoid unpleasant possible consequences to persons and Amateur Radio in this country.

"The wires of an electric blasting cap can act as an antenna and pick up radio energy and if the combination of wires is just right, and the radio transmitter is close enough, the bridge wire in the cap can be heated sufficiently by the radio frequency current produced by the wires so that the cap can be exploded."

"The current needs to be of the order of 0.25 amperes or more."

"The greatest danger arises when the two ends of the cap are a total length equal to one half wavelength with the cap in the middle. A serious danger also exists if one end is grounded and the other is grounded close to the cap."

"It has been reported that an electric blasting cap placed in the rear of a car, in the partition of a police car which had a transmitter was exploded while the transmitter was operating."

"The experiments with 100 watt Amateur Radio it was possible to shoot electric blasting caps 30 to 30 ft. below the horizontal antenna."

The article then goes on to suggest "the desirable minimum distance of separation between radio broadcasting stations and such blasting operations." These include:—

1. Input power between 6 and 30w.—100 ft.
 2. Input power between 30w and 100w.—200 ft.
- It is suggested also that "the clear distances between the transmitter should be kept strictly turned off and preferably locked."

On reflecting these statements, one realises that a 33 ft. lead to one of these electric blasting caps could be a disaster and indeed, and it happens to form a resonant half wave on 40 mhz, our commonest mobile band, with the cap situated at a current peak in the

centre. This condition holds too with lead lengths of odd multiples of 33 ft. which are even more likely to occur. The current necessary to set the cap off is also very little and, by way of comparison, it is similar in magnitude to the current in a small toy globe.

So with these thoughts in mind, I suggest that Amateurs watch for any blasting signs should they be using their transmitter and that they at least cut their car engine until well past the potential danger zone.

—Clem Maloof, VK6AMA.

ROSS HULL MEMORIAL V.H.F. CONTEST

Editor "A.R." Dear Sir,

We were interested to read the comments by David Rankin, VK3QV, regarding a proposed amendment to the rules of the contest.

We are in agreement with the general principles involved in the revised system of scoring, basing the points per contact on a distance basis, rather than on Interstate and Intra-State contacts. An example of the inadequacy of the latter system is the following example from the 1960-61 Contest, Section C, 144 Mc. A contact from the South East of VK5 to VK7, a distance of approximately 450 miles, would earn the contestant 2 points. A contact by the same station, to a VK3 station located close to the VK3-VK5 border, say a distance of only 30 miles, would also gain the contestant 2 pts. A system of scoring based on the above does not provide much incentive for an operator to spend a lot of time during a Contest attempting to work a weak DX signal, when there is a number of strong stations close by. But worth the same number of scoring points per contact.

We therefore urge the adoption of the new scoring system, but with the following modification, viz., that scoring points be allowed for local contacts. There are two reasons for this.

1. To encourage a maximum amount of activity on all v.h.f. bands, e.g. a reference to the proposed scoring system for the 144 Mc. band, no points are allowed for contacts of less than 30 miles. This may discourage stations with simpler equipment from participating in the Contest. Don't forget that the fellow with simple equipment this year, may graduate to higher power, a larger antenna, higher frequency and more sophisticated equipment. Knowledge next year, provided his interest in v.h.f. is fostered by remembering his requirements during contests, etc. Not everyone participates in a contest with the object of winning it.

2. After some calculations on particulars supplied by various entrants in the Contest, it is felt that a metropolitan and a country station with similar equipment would have a more or less equal chance of winning. If the local contacts counted for scoring points, VK5AW will be happy to discuss this point with anyone interested, either on 7 or 144 Mc.

In view of these comments, a suggested modification to the scoring table follows:—

Distance Between Stations	Points per Contact					
	30 Mc.	144 Mc.	222 Mc.	288 Mc.	336 Mc.	Higher
Up to 10 miles	1	1	1	1	1	1
Over 10 and up to 25 miles	1	1	1	1	1	1
" 25 " 50 "	1	1	1	1	1	1
" 50 " 100 "	1	1	1	1	1	1
" 100 " 150 "	1	1	1	1	1	1
" 150 " 200 "	1	1	1	1	1	1
" 200 " 300 "	2	2	2	2	2	2
" 300 " 500 "	2	2	2	2	2	2
" 500 " 1000 "	3	3	3	3	3	3
" 1000 " 5000 "	4	4	4	4	4	4
Greater than 5000 "	5	5	5	5	5	5

As a final comment, the suggestion of a contestant choosing one week from an operating period of one month is reasonable and sound. Let's have some more comments from those interested, to enable the rules to be modified in time for the 1961-62 Contest.

D. A. Carthew, VK5CAW.
A. C. Rechner, VK5CZT.

Editor "A.R." Dear Sir,

With reference to the letter from VK3QV published in April "A.R." I would like to join David's comments and express a point of v.h.f. activity. I must admit I have no clear-cut views on whether the Ross Hull Memorial Contest, in particular, should be the form of a king size convention, or an all-out battle of technical skills. I am sure however that points will be scored in any contest by the more skilled and quicker and more progressive and the indefatigable 3AZ will not talk himself into a state of post contest shock by working long hours if an easier method exists.

Unfortunately I cannot see a scoring system alone increasing v.h.f. activity at present, because the average points per station would offset the great number of stations on 50 Mc. and 144 Mc. I feel that a drive once or twice a year is more important than rather that this should be constant throughout the year. Every field day, scramble, convention, and even club drives could have v.h.f. stations, with a major or minor prize necessary to make up for any lack of prize in personal achievement.

A scoring table such as suggested by VK3QV would certainly be a step in the right direction, although I would be inclined to allot even more points to stations at 222 Mc. and 288 Mc. This in itself would only be effective if a reasonable number of stations was operating, but it could be the incentive needed to overcome the average points per station. As noted by the writer this v.h.f. year, and may offer some encouragement to those building equipment for higher frequencies.

I would not try to discourage the contestant who is sufficiently keen to spend a lot of time in a contest but there is no doubt that more interesting competition would result if country and DX stations worked, resulted in more points. This would be of great benefit to those who are at a disadvantage at present and would bring about a reciprocal reward.

The need for some consideration here is indicated by the relative few who have worked 222 Mc. and 288 Mc. even though 144 Mc. contacts during the last v.h.f., and Ross Hull Memorial Contests. It just wasn't worth the effort of 2 points as far as the Contest was concerned.

I hope that these comments will help and not hinder the good people who spend so much time organising.

—Richard J. Heighway, VK3ABK.



VHF NOTES

(Continued from Page 11)

ever QSB was very noticeable. The 144 Mc. signals were also of a varying nature, but were much more numerous on occasion. 288 Mc. was not successful, but Don 6ZAV thinks he heard their carrier but could not be certain. The wind was strong and the conditions were windy conditions, but were very comfortable in Kevin's caravan which is also his shack. Power was drawn from a battery charged with a petrol generator.—RR.

TASMANIA

The March meeting of the V.H.F. Group, consisted of a visit to the AB3T on Mount Wellington. I guess we were lucky to catch a night with the temperature above (but only just) freezing point. We received an excellent discourse on the gear in use. A brisk search on the way out made sure their supplies were kept normal.

Incidentally, the combine "Neddy Associates," presumed to be under the control of David 7ZAI, will have to come under close scrutiny if some of its disposal of surplus gear is not kept normal.

We believe that Ted Evans, 7TJ, has gear capable of operating at 1215 Mc. and is interested in making use of it.

—Neddy Associates, to report DX-wise apart from a few VK5 signs on April 2. Local activity, however, is quite good: Phillip 7ZAX surprised every one with his new modulator and his new "80" eye. "80" eye was a "erator." At least we were well prepared for it!

144 Mc.—Most efforts are being concentrated on 144 Mc. and 222 Mc. The 144 Mc. is being used by 7ZAI, 7ZAI seems to be engineering a massive system to be lodged on a new tower. 7ZBE has increased power and antenna size, and is working on a new antenna.

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When all this is finished we hope to arrange some sort of collection in North and South West Tasmania, and, in the near future, will be able to announce that we have "scaled" the mountains.

Another place being investigated is that of a passive repeater installed on Mount Wellington. Our researchers are at present gleaning information on such a project.

Another project we hope to pursue is to organise, as a club project, the construction of a number of 2 m transceivers by members. Thus we hope to have, on call, a number of portable rigs which could be used by the Institute.

144 Mc.—Still rather dormant but providing an excellent medium for "high level" rag-chewing. 7ZAU was recently heard 5 x 7 by 7ZAO/P at Carlton—reflecting signals off Mt. Wellington. 7ZAO.

Maurice Cox, W1A-13055
Flat 1, 37 Boyd Crescent,
Olympic Village, Heidelberg,
N.3, Victoria.

It is most gratifying to receive all the wonderful letters that VK s.w.l.s. are writing to me. They certainly keep me busy answering all their queries and I am only sorry I cannot help you all. If your reply takes some time in coming back, be patient, it will come; I take everyone in hand.

We will soon have available the two S.W.L. Awards and in the next issue of these notes I will inform you what is required for these two Awards.

CORRESPONDENCE

I think the following s.w.l.s. for their letters: Colin Hutchence L5031, Thomas L3063, Eric Trebilcock, Kevin Walsh L3089, P. Horn, Art Westcott L2136/VK4, Peter Drew VK6, Anthony Mullen L2064, Harry Major, Don Grantley "Sir" Charles Abernethy L2211 the letter, in front of Chas. Abernethy was given to him by W4TK who sent him a card and letter addressed to Don Grantley. The letter confirmed knight of the s.w.l. of VK land). To continue, Peter Field L25039, Craig Cook L3093, Arthur Lock VK3AU, Howard Mackenzie Harvey L3034, Fred Mackiewicz, Richard McKel, John Walker, Dave Jenkins L3039—what a bag full, eh?

Now that you all know the only have one page, so I'll take out of each letter only parts of, so hope that it is of interest to you all.

Col. Hutchence wishes he had been at Radio Australia, but missed it. He was at the first meeting five members were present, and with SZCR, they discussed v.h.f. propagation. Col. entered the N.F.D. and scored 200 pts. sending me a photo of the VK8 Group for the page.

Lin Thomas, now a Z call, but still a keen s.w.l. has no time to spare due to blowing in his modulation tubes. That's no good Ian, go back to s.w.l., hi. He says 20 mx has been good, but not with some QRM, QSB and QRN—lan, that always there, getting that 8 mx signal out, one always has to keep on trying.

Kevin Walsh. He never stops listening and tells me that he handled 20,000 odd QSLs during his reign of Acting Federal QSL Manager. On N.F.D. work and went to the West Coast Cricket, but managed 145 points. You know he used to listen between 12 midnight and 5 a.m. but not any more—he reckons that he is getting too old. (You're only as old as you feel, Eric.) He has received his N.Z.A.R.T. certificate, the one of many over a period of years. He reckons the N.F.D. is the best contest because one has to search for stations. In 27 hrs. out of 48 hrs., he scored 1,020 pts. in the B.E.R.U. Contest this year, fair enough Eric.

Kevin Walsh is next, he reckons he feels guilty at not coming to our meetings because he has been always coming Kevin, you will learn something and you never know (as you asked would it be possible to get a loan of a rx), one of the boys might be able to help you. Peter is in the Army, but he is a specialist sig. training and is in charge of the schools' sig. unit and hopes to obtain a No. 32 call. Peter is the school use.

Thanks Kevin, hope to see you soon.

Peter Horn gets up at 5 a.m. to listen to ZL b.c. stations. He has a Com. B.C. and no rx. He has SA7 conv, 6SK7 in 6SS7, 6X4 and audio, 6V8 output, 6X5 rect., but sig. ops. He copied 80 b.c. stations at night, all 5 x 8. He got the best results in the contest.

Thanks Peter for your letters. By the way, Peter is an ex-ZL.

Artie tells me he has pulled down his QQ and is now using a Mosley TA-33-JR beam and it's the ant's pants, better than the Quad. So what with HQ170 and the T433, he should be in the district. Don Grantley says he's heard a lot about the Drake ZA 2A rx and they are marvellous on s.s.b., but noisy on a.m. Artie is also a keen 50 Mc. DX man and he after cards right and left. I could write more about Artie's activities, but space does not permit.

Peter Drew, of VK6, has been a member of the W.I.A. for seven months. He has three rx's (all poor), but they work. With those three he can listen to 80, 14 and 20 mx; his

antenna is a short length of wire, 20 ft. high. He tells me he wrote to the VK6 s.w.l. Group for a number, but no reply and no number. Peter is still at school, but very keen.

Anthony Mullen sends me scores for the DX ladder, he's only beginner, but we all started at the beginning, eh? Think I can sought your scores out, Anthony.

Harry Major will soon be a member of the VK3 Group. He's been in hospital too; all the best for a speedy recovery. Harry. He gave a lecture to 84 lads at his school on DX and was listening and has written a number of talk in the school magazine—good show, perhaps you would like to give the VK3 S.W.L. Group one on your early days of listening.

Don Grantley. I could write pages on his activities, anyhow here's a little of it. He's sent out a lot of cards this year on phone and s.s.b. and he has written a number of quite a lot too, you should see the list! He obtained 560 pts. in the N.F.D. His Marconi rx, type unknown, saw two f.r. stations, three f.r. with gain control, KIMCDD Kure 1A, will be a new country soon and you QSL via KIMBID. Don is very interested in classical music (like me) and has a fine collection of records.

More news from Don. "We note that there has been a gradual increase in DX on the lower frequencies. This is due to the fact that there are providing some really good countries in the past few weeks, whilst 80 is showing signs of life. However, most of the DX is on the way the bands are shaping, it would seem that the s.w.l. will have to either learn the code or take a holiday. Don't be side-tracked by the commercial stations, the members who insist that c.w. is out, most of the s.w.l.s. lower frequency listening will be on the way at present. KIMCDD Kure 1A, will be relied upon for any really intensive listening as we had a few years ago."

CONTESTS

Australia has made a clean sweep of the VK-ZL Contest in the S.W.L. Section once again, just who got the top score is unknown here as the list of writing, but we know that it was one of the VK s.w.l.s. The N.F.D. came and went with very little interest from the s.w.l.s. The only one who was in the river and operated as L2022 for about 3 hrs. only for a very modest score. Next one for the boys is the c.w. only B.E.R.U., which will be over in a few days. Congratulations to HERS-155 for winning the last one (VK Section); L2022 came last, hi!

Ross Hull Contest was a washout here, despite the very windy weather, Ross was able to handle the converter and went out of it after a week or so. The ART just isn't suitable for contest work, but Ross was able to count L3088 out of the v.h.f. field until he gets his other converter, output 10 meg., working again.

ACTIVITY

Other commitments keep L3088 out of business most of the time, however a bit of good DX still manages to reach the log at times. Latest for him is UG6KAA on 40 mx, taking the total score to 218 countries heard, and 70 confirmed.

Band conditions have been only fair in this neck of the woods, nevertheless despite the lack of phone and s.s.b. DX up here, there has been a few good DX's. I have been the patience to dig into the commercials. Countries heard on 40 include 4K4, JA, UG6, UG6A, ZL, DUB, and UG6. The DX was on 40. Openings on 15 have been rather infrequent, but nevertheless some really good phone DX has been heard on the occasions when it was there.

Chas. Abernethy has a new Eddystone 640 rx and by his letters he's doing remarkably well, going by what he has heard. To make the Eddystone double conversion, he has put a b.c. rx behind it. On the last i.f. of the 640, which has 1600 kc. i.f.s., he's connected to the serial coil on the coil on the 640, and tuned to 1600 kc. The b.c. rx then naturally converts to 455 kc. i.f., hence double conversion. Anybody not keen to make on that?

His antenna will soon be a 66 ft. 6 in. dipole. He does very well on 30 Mc. too and has collected 12 QSLs—VK2, 3, 4, 5, 6, 7 and 8—he only needs 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Peter Field writes that there are over 21 Amateur and 1400 s.w.l.s. in the W.I.A. —the four s.w.l.s. are Ron Christie L5038, Roger Miles, D. Killen and Tony Strong, plus Peter. The Amateurs will give an award to any s.w.l. who hears eight of the Elizabeth stations.

Peter's rx is of a type unknown, 13 tubes, ant. is 40 x 20 dipole, long 100 ft. and 20. He's going to send me a photo of his rx for this page to see if anybody can identify it for him.

Arthur's QSL complement consists of a Marconi 75 kc. to 18 Mc., a partly built converter for 10 and 15 mc., a long wire 54 ft. long 14 ft. high, and a 22 ft. tower. He has a 22 ft. tower, has a 22 ft. tower and a half finished 20 x 3 element beam—good work, Craig, that's the way to do it.

Arthur Lock VK3AUL. The first Amateur I've written about in this page (fully licensed). Arthur tells me he has trouble getting QSLs too, but he has received a lot of QSLs. It's hard to realise that you an Amateur has to use an I.R.C., that shouldn't be so. Arthur worked SABC, sent an I.R.C., but no card as he had received it. He has received a lot of W.A.C. on the wall. Arthur has an HRO rx, old model, so I sent him a copy of the circuit of my modified HRO. Arthur has beyond all my expectations, so hope it's of help to you. Hope the National Co. sent you the dope you wanted. Arthur finished his letter by wishing all the members of the S.W.L. Group a very successful and happy Convention (it was), and also a very successful year of activity in the Group and that the S.W.L. Group may continue to grow and produce many more fully licensed Hams. Thanks very much for those wishes, Arthur.

BAND CONDITIONS

10 mx. I've had a right royal time whilst on leave. 145 stations have been logged in three hours. There were 145 stations. K.A.S.T. list 1300, W6s, 5s, 4s, 3s, 2s, 1s and Vets. JA in the p.m. and a couple of Asians and Pacific Islands. They were UAG6A, JAGNP, JASBY, UAOLB, JAZXK, JA6YQ, JAJMA, JAJBPZ, UA0ZL, KR6W, UA3KND, JALC, TIE02, asked many more plus ZLA. Heard a couple of South Africans but they were weak. Anyhow I would suggest you all keep your ears peeled to 10 mx.

15 mx. has not been very good at all, but when open quite a few stations are heard, only 81 logged on this band, some of them were W6s of course.

20 mx. I've had a right royal time whilst on leave. 145 stations have been logged in three hours. There were 145 stations. K.A.S.T. list 1300, W6s, 5s, 4s, 3s, 2s, 1s and Vets. JA in the p.m. and a couple of Asians and Pacific Islands. They were UAG6A, JAGNP, JASBY, UAOLB, JAZXK, JA6YQ, JAJMA, JAJBPZ, UA0ZL, KR6W, UA3KND, JALC, TIE02, asked many more plus ZLA. Heard a couple of South Africans but they were weak. Anyhow I would suggest you all keep your ears peeled to 10 mx.

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40 mx. I've had a right royal time whilst on leave. 145 stations have been logged in three hours. There were 145 stations. K.A.S.T. list 1300, W6s, 5s, 4s, 3s, 2s, 1s and Vets. JA in the p.m. and a couple of Asians and Pacific Islands. They were UAG6A, JAGNP, JASBY, UAOLB, JAZXK, JA6YQ, JAJMA, JAJBPZ, UA0ZL, KR6W, UA3KND, JALC, TIE02, asked many more plus ZLA. Heard a couple of South Africans but they were weak. Anyhow I would suggest you all keep your ears peeled to 10 mx.

50 mx. I've had a right royal time whilst on leave. 145 stations have been logged in three hours. There were 145 stations. K.A.S.T. list 1300, W6s, 5s, 4s, 3s, 2s, 1s and Vets. JA in the p.m. and a couple of Asians and Pacific Islands. They were UAG6A, JAGNP, JASBY, UAOLB, JAZXK, JA6YQ, JAJMA, JAJBPZ, UA0ZL, KR6W, UA3KND, JALC, TIE02, asked many more plus ZLA. Heard a couple of South Africans but they were weak. Anyhow I would suggest you all keep your ears peeled to 10 mx.

60 mx. I've had a right royal time whilst on leave. 145 stations have been logged in three hours. There were 145 stations. K.A.S.T. list 1300, W6s, 5s, 4s, 3s, 2s, 1s and Vets. JA in the p.m. and a couple of Asians and Pacific Islands. They were UAG6A, JAGNP, JASBY, UAOLB, JAZXK, JA6YQ, JAJMA, JAJBPZ, UA0ZL, KR6W, UA3KND, JALC, TIE02, asked many more plus ZLA. Heard a couple of South Africans but they were weak. Anyhow I would suggest you all keep your ears peeled to 10 mx.

70 mx. I've had a right royal time whilst on leave. 145 stations have been logged in three hours. There were 145 stations. K.A.S.T. list 1300, W6s, 5s, 4s, 3s, 2s, 1s and Vets. JA in the p.m. and a couple of Asians and Pacific Islands. They were UAG6A, JAGNP, JASBY, UAOLB, JAZXK, JA6YQ, JAJMA, JAJBPZ, UA0ZL, KR6W, UA3KND, JALC, TIE02, asked many more plus ZLA. Heard a couple of South Africans but they were weak. Anyhow I would suggest you all keep your ears peeled to 10 mx.

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SIDE BAND

Bob Pounsett, VK2AQJ
6 Alice Street,
Queanbeyan, N.S.W.

PHONE PATCH

What are your thoughts on this subject? I have heard some complaints regarding the subject, but I think who have been asked to shift frequency to allow Pacific Island-U.S. phone patches to be placed. A lot of argument has gone on about whether this is a strictly Amateur activity or not.

As morale boosters to service personnel of the U.S. Forces in the Pacific, this facility provided by Amateur Stations, is of great benefit not only to the Serviceman himself, but to the Amateur Service. It shows the layman that the Amateur can provide a communications medium that is not just a toy. The advantage of a phone patch in the Amateur Station during an emergency could be of immense value.

While not expecting our licensing authority to authorise phone-patch to Australian stations on the same basis as the F.C.C. in the United States, I, for one, would like to see permission granted for calls to be made to and from Antarctic personnel who are isolated. This would be a small contribution when compared to the service that these men are giving Australia and the rest of mankind. This facility could also be extended to our Servicemen serving in Malaysia and other areas remote from their homeland.

PHASING PLUS FILTER EQUALS GOOD S.B.

The Sydney team, Leo VK2AC and Harry Z2A, have been experimenting with a combination of phasing and crystal filter methods to generate a sideband filter. The results have been most satisfying. Carrier suppression first by the phasing section and then further by the slope of the filter section has resulted in a very good suppression figure. Unwanted sideband suppression is also outstanding in all respects.

The phasing-filter package was applied to Harry's "Sideband Package" (tx which normally uses a 6AG5 tube and a 6BU8 balanced mixer tube). Leo and Harry have been unhappy about the carrier suppression obtained in the original circuit and found this new method superior in all respects.

Getting down to details, the s.b. signal is generated firstly at 440 kc. by the phasing method, amplified by a 6AG5 tube and then passed through a single section half lattice crystal filter. This well processed s.b. signal is then changed to 2250 kc. using another oscillator and a 6BU8 balanced mixer tube. The 6BU8 performs very well in this application and is much cheaper than that other excellent mixer, the 7900.

GSBV ANTENNA

Going from one extreme to the other. From s.b. generation to the antenna I have had some enthusiastic reports from sidebanders using an antenna system that appeared in the January 1961 issue of "A.R." This is the GSBV design. It performs very well on 80, 40, 20 and 10 metres, but has a high a.w.r. on 15 mx. It seems to be the answer for those of us who have an average backyard and the overall length is 109 feet. It can occupy a slightly shorter length if one mast is used to support the centre and 300 ohm matching transformer, and the radiating portion is sloped down at a shallow angle. This is the antenna to solve that 80 mx problem and increase the activity around 3.7 Mc. If you have any doubts, call VK3QZ or VK1JK for a convincing demonstration.

PERSONAL

Welcome to a couple of newcomers to our ranks. VK2APP of Mont Eagle, near Young, needs no introduction and has been interested in s.b. for a long time. I am pleased to meet the one from whom he caught this fascinating disease. Peter has a Hallcrafters HT37 which, paired with his SX100 rx, should provide many hours of enjoyment. Using a home-brew exciter is Bob VK2NF, of Sydney. Bob is by no means a stranger to 40 mx sidebanders,

having often joined our nets with his a.m. equipment. Bob is using the adaptor described by Stan Burke, VK2EL, in the July 1959 "A.R."

Activity in VK1 has been at a rather low ebb since the New Year with Arch VK1GV being the sole s.b. sidebander on the air. On 80 mx only, Stan VK1SB, who had been holding the 20 mx fort, much to the delight of W.P.X. and W.A.V.K.A. hunters, has been on the sick list involving a spell in hospital. He is back home again now taking things quietly but having a few contacts on 20 mx. Interest is shared up in the Capital Territory with VK1JE, FT, ML, all making plans to appear on the bands using yours and my favourite mode.

Up on Lake Macquarie, Doug VK2ASA has been absent from the bands for several weeks while awaiting a replacement power supply transformer for his HT37 tx. Doug has also moved to a new location and has water on three sides, being situated on a small peninsula—should be good for 80 mx and what a pity he cannot use the 50 m.b. band.

Menidie Jack, who now lives in the Sydney area, has enticed Gil VK2RI to shift from Ternterfield and take up residence in the metropolitan area. They both work at the same establishment now and rumour has it that s.a.b. gets mentioned occasionally during "smoko" after the VK2RI VK2RI performances on 40 mx in the past, how do they manage to keep the "smokes" down to ten minutes? Yet GILL is established in a home, breaks the t.v. problem, and has water on the air, but as yet Gil has to find a home for his tx and family.



DX NOTES

(Continued from page 13)

5/78 when conditions are good. VK2QL also heard with good c.w. signal on 7 Mc. VK3SK and VK2ID have been logged on 7 Mc. s.s.b., plus 20 m.b. c.w.

Sven Elfving SM3-3104 (opr. at SL320) is a member of the Polar Bear Radio Club and Editor of the "DXer". He is willing to help the VK boys with any QTTs they need. Europe or anywhere—he has thousands of mailing addresses of new and rarer Hams. He says I'd be happy to help you fellows across. For Northern Europe I can help you get the cards easily if you enclose two I.P.C.'s to cover s.a.s.e. envelope to the station and back."

The Polar Bear Club has produced a Russian Call Book which lists about 1,000 U stations in all the rarer districts, with name, QTH, region, oblast, zone. It costs 2 dollars U.S. This appears to be the only book of call signs available from the U.S.S.R. Address S. Elfving, Soligardsgatan 15, Ornskoldsvik, Sweden.

Eric BERS105 is kept very busy handling the inward cards for the VK3 QSL Bureau, so is not spending such long periods at the receiver. With cards from HK0HCA and SN1M4, his total now reaches 205 countries confirmed. 7 Mc. c.w. heard: HK0BCE, LZ1KID, OK1KUR, UA0GP, UA0KCA, UB5JJ, UB5UX, VE2KE, VR2DK, ZC4IP, ZK1AR, SM5CBB/MK; phone heard: KH0BIA, VK2FV/LH, VKEW, VK0GR, SM2QD, 14 Mc. c.w. heard: BV3HPT, EP1AD, FB3XZ, FB3YV, FB3ZZ, FK3AW, FK3AM, GD3FBS, HC2CS, HLAKAQ, JZ0PH, KZ2MQ, JZ0PH, MP4AM, OA4PN, WO1J/PK, UA9YAC (Zone 23), UL1KQ, VK0GQ, VK1KIA, VK1KRT, VP3MC, VR1B, ZK1AK, ZM5AC, 8T1AD.

Dave L3099 has spent more time on 7 Mc. band and found conditions quite good with Europeans coming in well each morning around

1800z. JAs, Ws and a couple of HKs were logged in the evening, on a little more ZC. He is now building transistor and xtal converters for all bands 3.5-28 Mc. 3.5 Mc. c.w. heard: W1IIB, 7 Mc. hrd.: LA2NG/P, LZ2BKA, HK1FF, ZC4IP, GD3FBS, YD0AC, JAA5A, UA1DZ, JA1AEA, W3CC, HK0TD, DJ2JS, UA3FT, SL5AB, 14 Mc. hrd.: UA0AS, ULTKAD, IT1TAI, ZK1AK, W3QYV, JZ0PQ, DU1OR. Thanks for other news Dave.

Laurie VK2AMB has worked the following stations on 14 Mc. c.w.: CP3CN, FB3XK, OZ3M1, UQ2KBR, MP4TAC, ITHFA, VY3FH, VY3H, heard: BV3HPT, CE0AD, CRT, VS6GP, VU2SOZ, VU7TOZ, VU2NRN, 5A2CW, VY5SAG, VSB8AVG, SV0WI, WO1J/PK, VQ2AB, 14 Mc. phone worked: VK0RF, heard: ZE1JR, K04AL, XE1BC, XE1VL, VR1G.

QSL RECEIVED

VK5EK: XW8AL, DJ3BB, 45TLB, E19Y, and KV4CI.

VK2AMB: V590C (Oman).

VK2QL: KV4CI for 3.5 and 7 Mc., HH2OT, HS1R, UN1AN, Z57M, 4X4YL, ETJUS.

VK2AR: SP8KAR, 4X4BS, HB1G/AR, PY2BDZ, V59AQ, ZB1HC, EA8VC, CN5CJ.

BERS105: DU6TY, FA2VC, FLAZA, HK0HCA, JZ0PH, KZ2TD, MP4QAC, OD6LX, WO1J/PK, UL1P, UZ2PAC, K0TFT/VOL, YQ1HT, YQ1RS, VQ8BM, V59EM, V590B, V590D, ZK1AR, SN1M4.

VK3TI: AF2MR, BV3HPT, JZ0PH, JZ0PM, SM1EM, V59VP, VQ8BM, VY1P, VY6Q, OA4DT, V59OC, Z2ZTH, Y5AAB, YUIEH, ZD2AD, ZK1AR, XE4JX, 4X4JU, 5N6T, XW8AL and V59MB.

ADDRESSES

VK2AQJ—Christian Brothers College, Gosford, N.S.W.

VK3AGO—Mrs. Lorrie Gardiner, 72 Heathwood St., East Ringwood, Vic.

LAING/P—C/o Norwegian Embassy, Reykjavik, Iceland.

JZ0PH—Joop, 1903 Hortenslaag, Blak, Netherlands New Guinea.

Z2ZTH—Tun, 75 Bogoyoke Aung San St., Rangoon.

FK3AW—Via W2CTN.

VK0PJ—Via GMIU.

OA4KU—Box 375, Lima, Peru.

ZK1AR—Via K4LRA, P.O. Box 85, Kendall, Florida, U.S.A.

(Tnx 2QL, BERS105, 3TL, and 3QV.)

In writing these notes I have used material from Don Chessier's DX Magazine and notes sent to me by SM3-3104 and several VKs. Thanks for the letters and hope to hear from you again next month, 73, John.

50 Mc. W.A.S.

Call	Cor. Add. No.	Cntr.	Call	Cor. Add. No.	Cntr.
VK2WJ	13	4	VK2AEZ	10	1
VK3PG	5	3	VK3XA	11	1
VK2VW	9	3	VK2GMM	12	1
VK3GG	19	3	VK3ACL	14	1
VK3ZBL	21	3	VK3ZD	16	1
VK41Y	2	2	VK2HO	17	1
VK4HR	4	2	VK3ZEA	18	1
VK5LC	1	1	VK5ZAX	20	1
VK6DW	3	1	VK2ABC	8	
VK3RR	6	1	VK2WH	15	
VK3HT	7	1			

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" 66 MA	£11/3/6
" 66 MD	£9/3/0
" 67 MA	£11/3/6
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NOTES

FEDERAL

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Mr. B. H. Anderson, VK2AND.

Victoria:

Mr. R. A. C. Anderson, VK3WY.
Mr. F. P. O'Dwyer, VK3OF.
Mr. N. L. Storck, VK3ZO.

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Mr. K. D. M. O'Grice, VK4DGD.
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Mr. F. E. Nicholls, VK7RY.
Mr. J. A. Nicholls, VK7ZTA.
Mr. W. N. M. Nisbet, VK7BN.

The above-mentioned have indicated that they have no objection to publication in the Institute's magazine, "A.R.", of information that they are members of the Amateur Advisory Committee.

The membership of the New South Wales Committee is incomplete, three having indicated that they do not desire publication of information that they are members of the Committee.

Sept. '60. After a short period this Federation changed to **Senegal Republic and Mali Republic** (formerly **Fr. Sudan**). Both areas will now be given separate D.X.C.C. Listing as from 20/6/60.

Kallingsberg Region (UA2), situated on the Baltic Sea between Poland and Latvia, is a part of European R.S.F.R. from which it is sufficiently removed to warrant separate listing as outlined in "A.R.", Oct. '60, page 26, for any post-war contacts.

Amend D.X.C.C. Countries List published in "A.R.", Jan. '61, accordingly.

50 Mc. W.A.S.: Congratulations to Bill Wehr, 90 Mc. W.A.S. Congratulations to H. Blythe, VK3ZBL who has been issued Award No. 21 with the addition of Papua, New Zealand and Japan.

W.A.V.K.C.A.: Further Awards Nos. 148-155 were issued during January-February '61 to WBLLI, W1VVG, W6GCM, W4MLI, K6CQM, W6GPF, W3LE, W6BWS, ZLACK, K3CFR and KH6AC.

—Alf Klissick, VK3KB, Awards Manager.

NEW SOUTH WALES

Unfortunately, owing to an error of judgment I did not get the March notes away on the due date, but hope that they will be acceptable to members early next month.

Anyone who may complain of any inactivity in the Division must indeed be hard to please, for I think that at no stage in our history have we had so many opportunities to give information on the many phases of Amateur Radio. For some months past we have two meetings each month at which lectures and demonstrations are taken place.

Each month we have the general meeting held normally at Science House, Gloucester St., Sydney; the meeting held on the fourth Friday of each month and commencing at 8 p.m. On the second Friday of the month an additional meeting is held at our headquarters, 14 Acheson St., Crows Nest, which is only 150 yards from St. Leonards Station, and also very close to transport from the city and suburbs.

Unfortunately, for some months, neither of these meetings has met and the support they deserve, surely a fine way of showing appreciation of the work done by those who spend so much time in planning on behalf of our many members, is being requested. We meet at either night and are assured of an interesting and informative evening.

Most activities are concerned with the mid-month meeting at Crows Nest where a novel evening was arranged by Harold 2AAH, who as Divisional Education Officer, has the task of making the evening interesting and enjoyable in the form of a quiz session, but with a difference, in that the audience asked the questions which were capable dealt with by Harold. This developed into something of great interest and as the subject was "Antennae" the questions were many and varied.

As remarked previously, the attendance was not all that would be desired, but the keenness of those present made up for their lack of numbers. Further lectures are arranged for this informal gathering and members and their friends are requested to make it a regular feature. Full details of coming events are always featured in both the Bulletin and the weekly broadsheet.

The March monthly general meeting was held on 24th March and again the attendance was not all that would be desired. The President, Rev. Dr. 2YB, took the chair and in opening proceedings welcomed the visitors: WA8OMF, temporarily stranded in Sydney due to stoppage of air traffic schedules; and a VK4 who, The President reported the untimely passing of Harold Peterson, VK2HP, for many years prominent in Institute affairs in this State, and members observed the customary one-minute silence.

Sixteen new members were admitted to membership for the month and the Secretary reported four renunciations.

The lecture for the evening was one on a most interesting subject "The Science of the forecasting of Magnetic Storms," given by Mr. Cooke, of the Ionospheric Prediction Service, who outlined the activities of the service, the difficulties they encounter and the theory of Ionospheric Resonance. Mr. Cooke is the officer responsible for supplying to the Division the forecasts which are given in the broadsheet each week, and which are used by a good effect by those of us who chase the off-times elusive DX. He was assured at this meeting of the appreciation of members for this service to us.

A notice of motion was dealt with, regarding the use of frequency shift keying on all bands. The originator of the motion, Barry 2AAB, spoke of the desirability of using this mode

and after discussion a vote was taken which proved to be in favour of the motion.

Following further general business, the meeting closed for supper and the usual ragchew.

OPERATION PICNIC

"Operation Picnic" occurred on Saturday, 18th Feb., and was conducted by the Civil Defence Organisation in N.S.W. to check aspects of mass evacuation of Sydney subsequent to an attack. This exercise received much Press, Radio and T.V. publicity, most of it on a national basis. Four convoys of cars carrying 700 persons left various areas of Sydney journeying through the Blue Mountains to Katoomba.

Radio communication was provided by 144 Mc. mobile stations of the Blue Mountains Section and of the V.H.I. and T.V. Group, operating along the route, reporting the time and location of the various convoys en route. These spotlights were reported to Glenbrook, and to the main assembly point at Katoomba. Showground, where announcements were made over the public address amplifier as to the position of the various convoys.

Mobile stations in the field were Phil 2ZBX at Emu Plains; Wal 2MZ and Horry 2HIL at Glenbrook; Bob 2ASZ at Linden; John 2ZPJ at Wentworth Falls; Dick 2ZCF at Katoomba. The Blue Mountains Section home tx, 2AUX, was located at the Katoomba Showground and acted as control station, with operators Dave 2NKC and Norm 2QK at the controls. Amateurs assisted in the exercise in various capacities.

The net operated most effectively despite the difficult terrain and signals were very good at most times. The 700 visitors were provided with morning and afternoon meals at Katoomba by the Blue Mountains Civil Defence Section.

Divisional Council thanks all those who participated in the day's operations for their efforts, and the Civil Defence Controller for the Blue Mountains, C. A. Strachan, was more than pleased with the performance of the radio communications network.

ANNUAL MEETING

The Annual Meeting of the Division was held at Science House, Gloucester St., Sydney, on 24th March, at which the attendance, though adequate, was, to say the least, disappointing.

The Retiring President took the chair at 3.5 p.m., receiving apologies for non-attendance from VKs 2APQ, 2AGH, 2TI and Barney Smythe. Following the reading of the minutes of the previous Annual Meeting, the Divisional Officer, the Returning Officer was appointed, Dave 2EO, who, with the assistance of a team of scrutineers, attended to the counting of the votes in the ballot for the election of Divisional Council for the ensuing year.

A record number of ballot papers were returned, 401, of which 18 proved to be informal. The successful councillors are: N. Beard, 2ALF; W. Lewis, 2YB; H. Burfoot, 2AAH; M. Pfeffer,

W.I.A. D.X.C.C.

Listed below are the highest twelve members in each section. New members and those whose totals have been amended will also be shown.

PHONE

Call	Cer. Cnt- No. rises	Call	Cer. Cnt- No. rises
VK6RU	2 251	VK6KW	4 202
VK5MK	45 243	VK6JW	12 182
VK4FJ	21 221	VK3JB	50 171
VK3WL	14 211	VK4RW	23 164
VK3ATN	26 204	VK3EE	10 163

C.W.

Call	Cer. Cnt- No. rises	Call	Cer. Cnt- No. rises
VK3K	26 251	VK3RU	48 213
VK3CX	26 275	VK3XU	48 213
VK4FJ	29 264	VK7LZ	17 212
VK3NC	19 236	VK6RU	18 210
VK3FH	15 229	VK7LZ	17 212
VK3BZ	6 222	VK3RX	23 195

OPEN

Call	Cer. Cnt- No. rises	Call	Cer. Cnt- No. rises
VK2ACX	6 269	VK3BZ	4 231
VK4FJ	32 267	VK3JB	3 225
VK6RU	8 265	VK3WL	45 225
VK3MK	2 249	VK3JB	50 222
VK3NC	77 238	VK3XU	61 221
VK4HR	7 233	VK6KW	13 216

FEDERAL QSL BUREAU

Hams in Victoria and South Australia were surprised and delighted during early April, by a flying visit from "Dud" Charman, G6CJ, "Dud," who is a Past President of the R.S.G.B. and well known to Australians since 1935, had a riotous time in VK3 and spent the entire week-end in Melbourne renewing and cementing old air friendships. Complete with the outsize with which we always associate him, "Dud" seemed to enjoy his hurried visit to VK. Come again, "Dud" and stay longer.

The 1961 P.A.G.V.C. Contest of the V.E.R.O.N. (Netherlands) during April was again spoilt—in VK—by the failure to give sufficient advance notice of the Contest. For those who did make contacts, logs should be sent to P.A.G.V.C. Manager V.E.R.O.N., Keizersstraat 54, Gouda, Netherlands, by June 15.

—Ray Jones, VK3BJ, Manager.

FEDERAL AWARDS

D.X.C.C.: The Mail Federation (FFB) comprising areas previously known as Senegal and Fr. Sudan was formed as from 20/6/60 and given separate D.X.C.C. Listing in "A.R.",

SILENT KEY

It is with deep regret that we record the passing of:—

VK2HP—Harold Peterson.

VK6WD—Francis Duns.

Amateur Radio, May, 1961

VICTORIA

Well, lots of things have been happening in VK1 lately. I hope I can remember them all! Firstly there were the balloon hunts; probably, everyone knows about these as the air has been very busy on this business lately, but a few facts for those who are in the dark. Mac 3AVM, of the Physics Dept., has written the following report: "On the 12th of June, thanks, and has given these points about the first one held on 19th March. The balloon was launched at Pikes Creek, Reservoir, at 1215 hrs., burst at 97,000 ft. over Williams down at 1500 hrs., and landed near the Highway at Officer at 1500 hrs. (approx.), where it was recovered by Dave 3JW, and given to the d.f. unit. The 50 milliwatt transmission on 1891 Mc. was received from 1223 hrs. till 1450 hrs. The balloon was recovered by the d.f. unit as Coleraine, Warrnambool, Horsham, Benalla and Wangaratta.

The d.f. bearings were, on the whole, accurate, the main troubles being (a) bearings were taken at odd times and could not be correlated with others taken five minutes later; (b) some bearings were given from magnetic north, others from grid north (preferred), but often neither was specified; (c) grid reference of some d.f. QTHs was not known; (d) the plot centre and could have accounted for some of the errors.

However, the exercise has shown that the frequency and power outputs are suitable for balloon recovery anywhere in the State, and Dr. Hopper and his co-workers are delighted with the results.

After this performance, during which stations such as 3KR helped a great deal in relaying, another trial was arranged for Sunday, 17th April. This was on a different set-up, 3ADW and folks (pun, get it?) careering about the country chasing elusive balloons. 3AOC again took the lead, because 3ADW was not a marine mobile and couldn't cross the Yarra in the last stages. Anyway, Mac says that they were very close to the balloons because they had the thing in visual contact. Michael says the balloon looked like a star, and as it was a clear day the 20 ft. balloon was very clearly visible. The Geelong and district boys were very active on this day too, but the balloon drifted to the east of Melbourne, over 3AOC, relying on his d.f. gear, eventually made the kill.

3WI was on 40 mx, operated by Dave 3QV, Jack 3CS, and Alan 3AE. John 3AK was on 30 ft. balloons, and Dave 3ADW was on radar station regularly (though it felt as if I was talking to myself all day). The fun was on 40 mx, and the balloons were determined to call in to 3WI with information about the weather, the balloon, the broadcasts, the institute, their mates, etc. etc. Anyway, all enjoyed the exercise, and the good publicity even on the t.v. A full account of the balloon project will appear shortly in "A.R." and I'll mention it again, in except to tell all those who have shown an interest even while not being directly concerned.

STATE CONVENTION

Remember the last Dinner? Bad cess to you if you don't; anyway, this year the State Convention will be held at Melbourne, and promises to be a beauty! It will be held on 30th September and 1st October, and the scheme seems to be that on the Saturday afternoon a conference room at Scott's will be used for Convention business, followed in the evening by the Annual Dinner at Scott's; remember last year!

Anyway, we will probably only be able to accommodate about 250 people, so when you receive further details about the Convention and Dinner, don't hesitate in replying with the necessary info, and cash promptly.

On the Sunday, a day in the country will be held with a series of activities designed to make the whole week-end a memorable one. Doug Howe, and Michael Owen are organising the show, and I'll be there. Remember the last Dinner? Yeah, well you won't forget this year's I'll bet! We would like a very big representation from the Country Zones so please organise a party from your neck of the woods, or bush or what-all.

LIBRARY

We do have a library, it's at the rooms, and we are very pleased to announce that Tom 3ZVQ has agreed to take on the job of librarian as soon as the building is opened. He will be well on the way by the time you read this, for work was started last month.

COUNCIL NEWS

At the Annual General Meeting, held last month, David 3ADW, our President, gave his report. I started to take notes, but the report was so lengthy and detailed that I gave up.

however, it is being sent to all members. When you get it read it very carefully and critically, and I've no doubt that you will come to the same conclusion that I have—that is that this past year has certainly been a year of effort, achievement, interest and constant and hard work by your Divisional Council. I feel that Council, the office-bearers, and all others who have helped are to be sincerely congratulated on the fine achievement of the past year. Not the least, our Secretary, Michael 3ZEO, and our Treasurer, Keith 3YQ, and of course our President David 3ADW, should be singled out for a special word of praise and thanks.

Maybe some corns have been trodden on, probably this is unavoidable when people are working almost without a single moment's devotion to duty as they all were. The Institute and the Amateur Service, as a whole have benefited I am sure from the combined efforts of the larger band workers, and their leaders, who have worked for us in the past year.

They are still there in office. Office-bearers for 1961 are as follows: President, D. Wardlaw, 3ADW; Vice-President, Elliott, 3AEL; Secretary, M. Owen, 3ZEO; Treasurer, K. Roget, 3YQ. Alan Elliott is also our Federal Councillor for 1961. I am sure that all of them there, give them the support you did last year and we're in for a further good year.

The P.M.G. Dept. advises that examinations for the Amateur Limited Licence will be held in future on the third Tuesday in January, April, July and October, and that the closing date is the 22nd of the month preceding that in which the examination will be held.

We have a supply of the new badges, smaller and neater than the old ones, 5/- from the Secretary.

WARNING

Be very careful about gear that may be offered to you, especially 3BZ tx and an Astor car radio converted for 1725 kc. These were stolen from the Elwood Life Saving Club's launch and sent to the Elwood members who had spent a lot of time installing them. Has anyone some surplus gear that we could give them to replace this gear? This is a very serious cause, and we'd like to help. If you can help with a tx or rx suitable for conversion and installation in a rescue launch let's know.

PERSONAL ITEMS

Let me have bits for this section of the notes, please. I'm not able to be on all hands every night, and I'm sure you are. I try to get on 80 mx on Thursday evenings; if not, please drop me a line. I can't make the news, only a few items from Penzance (ex-20U).

Noel 3ANS wrote me a very nice letter in March, it was unfortunately too late for inclusion in April "A.R.", but we can welcome this news this month. Noel is up at Wangaratta, having moved from Penzance (ex-20U) and is on 40 mx each night from 7.30-7.40. He tells me that he has 40 and 80 mx gear going, and will get on 2 mx soon. He's brought his tower with him and intends to stay in Wang., and as he has a 10 over 10, 60 ft. up, there will be activity from him. He and Bruce 3QC organised the "Ham Stand" at the Hobbies Exhibition and worked 40 and 80 mx.

SUBSCRIPTIONS

Please pay your Subscriptions PROMPTLY when due. Failure to do so may result in the loss of valuable issues of "Amateur Radio." High costs of production make it necessary to limit the number of extra copies printed each month.

WANTED!

ARTICLES

Can you write an article for "Amateur Radio"? How about one for Hints and Kinks?

The Voice of the Alps, Arthur 3AUL, has been in Chiltern during last month, and we've heard many QSOs. He's a very friendly fellow with blokes picking him about his motor-bike. Don't let them worry you, Arthur, I had a two-wheeler myself once. It's cheaper than a car, but one thing I'd like to know—why don't you turn it into a single-sideband linear? I know, know, yes, I know, but I just haven't got time.

Ten metres was a picnic over Easter, signals coming in loud and clear from all corners of the globe—after eight years I worked my first 10X on 10 over that time, a ZL! However, for yesterday it's cheaper than a car, but one thing I'd like to know—why don't you turn it into a single-sideband linear? I know, know, yes, I know, but I just haven't got time.

Two Zone Conventions were held in April, the S.W. Zone Convention, Western Zone, Couw, please have details for June "A.R." by the 28th of this month, fellows?

Jack 3APL is reported to be much better, he's up and about but has to return to hospital for further treatment. We wish him all the best for a complete recovery. Chin up, Jack, we're all thinking of you and looking forward to returning to you.

Bob 3UW is busy building a s.s.b. rig and a 2 mx rig based on Melbourne. Morton 3ANG is also saving up for a s.s.b. rig. VRIB on 10 and 20 is coming in from the States (inland). He operates 20 mx phone and uses a.m., is looking for VK3 contacts, especially 3BZ. He's also looking for VK3 contacts, especially 3BZ. He's also looking for VK3 contacts, especially 3BZ. He's also looking for VK3 contacts, especially 3BZ.

P.S. VK3AKA wrote this month, let him have some of the 1000 m. rot, but the 1st May if possible! Especially personal bits.

SOUTH WESTERN ZONE

The Zone Convention has been arranged in Warrnambool on 29th and 30th April. The local committee have arranged a full program of events, and the convention will be held at the Caledonian Hotel at 1830 hrs. The Annual Zone meeting will be held at 1430 hrs. on 29th, thus clearing the evening for a night's entertainment. The 30th will be a breakfast in the capable hands of Eric 3ANG.

Bill 3XE has treated himself to a new type X-point and it runs like a dream. He is sure to eliminate his carrier some day. Why though, Bill? What about eliminating the sidebands and using a single sideband? The equipment being built there, something must be wrong. The best one is a new g.d.o. which puts out a quite good signal for its 6.6 watt on 80 mx.

Only one 300 mc. break-in on c.w. is Eric 3XL who, after some initial troubles, has persuaded the v.f.o. to quite a good level. He's also been successful in reports that four members of the Geelong Club have been successful in passing the A.O.L.C.P. exam, and one, Harry, the Club President, has managed the A.O.C.P. Congratulations!

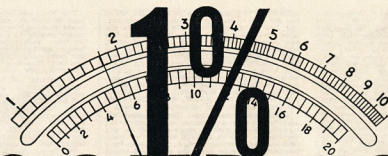
From Thorb 3APS comes news of two s.w.s. in his district. Both are members of the V.L.C. net and are doing 40 and 80 mx. They are Fred Bousefield and Jack Murphy and both will be sitting this month for the exam. Thorb has brushed the dust off the old code scullion as both have the right on the code exam. later. Good luck to both of you! Thorb has been putting his ground plane antenna on 80 mx.

Way up in the DX listings is Norman 3NC. Just as a reminder that power input is not the same as power output. Norman's old contrivances were made using 6 volt batteries and an F8B power supply. Input on c.w. is 8w, and on phone 4w. Antenna system was an ungrounded wire with one beam and one 20 ft. beam. The shack is in a good spot certainly but to work G. land on 20 mx phone is no mean feat.

Talking of DX, comes a report from that master of 80 mx Claude 2ZLIC of hearing a mobile contact from this location one Sunday afternoon. The phone was 25 and he was also at Gretna in VK1. However after a night out with 3KN, both of us called CQ, CQ DX and everything went quiet. I was a bit disappointed to get a brush off from a ZL station who decided to call his mate on sked on the channel. Brian 3XN was going QSO with the mobile using four (adapted) 807s in a grounded grid linear circuit (and an asbestos loudspeaker). Brian has also hung his antennae up and is now with me in the best results.

We are sorry to learn that Bill 3BU has not been again and the Zone hopes that you have long since recovered Bill and back on the band again.

James 3MC, who specialises in signals from space, has been reporting signals from balloons from Mildura and other places. James has been having receiving troubles and is looking



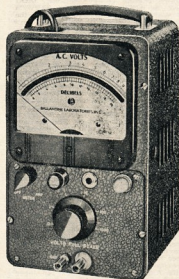
ACCURACY

over ENTIRE METER SCALE!

1 mv - 250 v, 20 cps - 20 kc

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This is the most precise instrument in the entire Ballantine line of sensitive wide-band Electronic Voltmeters.



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- High input impedance: 2 megohms shunted by 15 pF., except 25 pF. on lowest voltage range.
- Long life: Several thousands of hours of operation without servicing or recalibration.
- Does not require stabilised input voltage. Less than 1% change in indication with power supply change from 200 V. to 240 V.

- Five inch, mirror-backed, easy-to-read meter. Only two scales with mirror between. One is 1 to 10 for volts, and the second is 0 to 20 for decibels.

NOTE.—A New Ballantine Laboratory Standard device will be released later this month . . . The model 393 HF Transfer Voltmeter. Write for further details.

WRITE FOR BROCHURE TO THE SOLE AUSTRALIAN AGENTS . . .



WARBURTON FRANKI

VIC.: 359 LONSDALE ST., MELB. 67-8351.
QLD.: 233 ELIZABETH ST., BRIS. 31-2081.

N.S.W.: 307 KENT ST., SYDNEY. BX 1111
S.A.: 204 FLINDERS ST., ADELAIDE. W 1711

SOUTH AUSTRALIA

for ideas on stabilising the heater voltage with Zener diodes.

An SV station has given Neil 3HG his 108 country on a.s.b. all within twelve months too. After quite a while inactive during which time he had been busy with his exam. Keith is a listener—we hesitate to say short wave listener—of no mean repute. His latest effort has been to get a confirmation from Moscow Radio on 145 kc. and two other European stations in that region. Rx is an ARS. That is real DX you say?

John 3AGD is still compiling that Jamboree report and waiting. Should be over by this John will hope all is well.

Jim 3ABT has gear for 2 mrx ready and expects to go on 1296 Mc. Inter.

Much interest was shown in the recent balloon flights by various zone stations, some of whom were 3AMC, 3ALP and 3AGD. The tiny xc when in flight was heard at 58 to 59.9 all over the country, provided the antenna is well up the signal gets out.

Well chances next month will bring the new office-bearing gear, the old ones, best wishes and best DX—3AKN.

WESTERN ZONE

Activity on the higher frequency bands seem to be increasing in our zone. The Z call-chaps are doing a fine job, also there are a few interested listeners who have built up their own gear. We hope all is well.

welcome these boys to our bands in the near future.

Trev. 3ATR now has the S.E.C. connected and, very pleased with results. Half your luck, Trev., looks like another three years before it gets down this way.

Comedian, Chas. VRIB and Audrey on the arrival of Peter Charles. Perhaps this event may cramp Chas' style for a while, but guess he'll be back. We have heard some shack procedure by sleeping soundly at the appropriate times.—3AKW.

QUEENSLAND

TOWNSVILLE

After reading April "A.R." I have come to the conclusion that I am living in the wrong place. There is a high concentration of stations with a nice list of stations on the DX page (does he use that new receiver AFDRI?), and that s.w.l. Afion, in Atherton (rhymes doesn't it) is building a c.w. transmitter and incorporating all of the best circuits he can find for various stages. John 4DD gave a run down on the new s.s.b. building, making certain that he tries to obtain the ultimate in sensitivity, selectivity and stability. John was lucky to obtain some very choice parts for some of the gear. Alan made frequent use of the blackboard.

Alan 4PS again spent the Easter week-end in the mountains. The boys speculate what is the attraction there? Congratulations to Basil 4ZW and XYL, Zee, on the arrival of new harmonic. Bob 4ZL is the top of the wild after recent RTTY operations. Glad to hear they were successful. Local gang pleased to hear Ray Robinson, who is sure to be successful in his recent examination for Limited ticket, and Ken 4ZAK made the grade in Morse.

No information from the Apr and far north—no one has been heard from there. We further south in our capital city no one can and time to write notes for "A.R."—shame on you boys. Cannot find someone to sit at the end of the road of Scrubby and emulate his deeds. The pen is mightier than the long bow, so advertise the best State—Queensland! 73 ARW.

As a final remark last month, our Editor made the statement that once a year fortune smiles on "Us." Now, quite apart from the Editor's "Us," fortune only smiles once a year, but provides the VK5 Council with the opportunity to have a square look at the previous year's reporting, and invite a suitable person to take the year's work again set the standard for the next period.

The annual sojourn of Pansy Parsons (SPS) once each year has become an institution, and it's not only a tradition, but a "smoke," varies from the hospital section of a certain racecourse, to the other amenity of a stadium. In 1963, in spite of the report, in another place, that he was touring the State, he is up to his usual tricks, but at the time of writing it can be mentioned that there is no truth in the suggestion of a placement at the said racecourse had anything to do with him, except it is thought, that some s.s.b. operators may have been trying to "help him along."

Some recent remarks in these columns, aimed at s.s.b. operation, and the problems associated with receiving c.w. on a station, prompted forward quite a fan mail to our rotund friend, none of which he has as yet published. It is therefore suggested that the Editor, in the picture, someone might send him a copy of Don Stoner's latest work in that field, for rumour has it that the carrier removal idea has caught on as a result of the article.

The annual VK5 Picnic was held this year at Tea Tree Gully, where a reasonable number of the more athletic members assembled with some food for the picnic. In the inclement weather the programme committee saw their plans take shape, ranging from a scientific fruscon puzzle, through races, a knock-out, rolling-pin throwing, to a sedate knock-out cricket match.

Adequate time was provided in that balanced programme for the athletic drinks, breath recovery, and it was generally agreed a good day was had by all. The number who turned up was well over 100, and the weather in that sphere, and provided a good chance for the less fortunate ones to see the ingenuity displayed by those who had their sets open for the first time. The programme regard ranged from 288 Mc. gear with multilevel arrays, to one c.d. band job in a car set, to a 100 Mc. transmitter, to a loaded whip that would have done credit to a 9K2 oil baron.

Prizes for the obstacle race, consisting of a run, eat a dry biscuit, and blow up a balloon to bursting, was won by Bob Ring, with Clive SFE second, and Eric 5ZDQ third. One prominent member of the crowd, who was in with only one sideband he couldn't lift the balloon; had luck, Phil Threading the needle was an OM and XYL effort, with the Moore's 5RD leading from the Mitlow's (SMS) and Vivian's (5FO).

The less said about the rolling-pin throwing the better, but it was won by Mrs. SFE, second Mrs. SFE, with him (over the air) as a third. There was a race of (spots) between the c.w. and phone men, but as the c.w. blokes are in a state of confusion, the loss of the prize to the c.w. team was inevitable. The prize was a microminiaturised smooth flowing phone type. The cricket match, that annual hardy, was won by the c.w. team by one run; and what a run it was. There is always a danger of a c.w. as to who should be in which side, so in future, the c.w. men who wish to enter this test match will be asked to give up their c.w. licence, at least one QSL of a c.w. contact with Warwick SPS.

Talking of Warwick, forget to mention him before he did it. He has just instituted a new award, to be known as the W.A.O. (Worked All Oxbank) and can be won by having 30 or more QSLs with him (over the air) or (c.w.—not personal) on any frequency provided he is on 40 and you listen on 20, 15 or 10, or even Channel 9! It should prove an interesting contest, and one of our boys, who is sure to have may have to hurry to get in before he removes his carrier(s).

The trick resonant frequency circuit provided by Warwick, and brought in by a micro-miniaturised g.d.o.s, the assessment of the frequency varying between d.c. to 2,000 Mc. Eric 5ZDQ carried off the prize. One, then there was the DX Story Contest, and it was pleasing to see Les 5AX win it and bring the glory to Gawler. The yarn itself won't stand in repeats for there may be an R.I. interested, but the prize is worth a mention. It was a 1kw. final, that may or may not be a "Scrubby" style, a 100 Mc. modulator with it, but a key so Les is in the market now for something about the size of parallel push-pull 813s. Any offers? It would be cheaper to learn the code—Ed.)

The last meeting of the Division disposed of the formal business under the chairmanship of President John Hazeldine for the first time, and proceeded to the "Tender" programme presented by Warren and Norm. There seemed to be a race between those who to see who can out-bid the other, for a remark (rather rude it is thought) from a back-bencher stated "I wish Don 5ZM had bought Tubby SNO"—and that is saying something!

A capacity house witnessed these proceedings, it's remarkable how membership interest holds its own, and the evening was a very lively early hour (for VK5 that is) all but a few pieces had changed hands, and the various sellers were balancing the copper. It was noted that the lowest bid for an unidentified piece of gear (4d I think it was), whilst Tubby SNO and a couple of his contrives kept the bidding high. A mysterious SNO (spelled with a J, not a G) was providing the finance. At one stage Tubby quite unknowingly was bidding against Jeff for the same gear, Tubby won and Jeff paid—wouldn't it?

In case you haven't caught up to it yet, and to record it officially among the new Council, it is as follows: President: John Hazeldine, 5ZG 1st Vice: Presumably with 5ZG 2nd Vice-President: Phil Williams, SNN; Secretary: Brian Austin, SCA; Treasurer: Rex 5ZG 1st Vice: Presumably with 5ZG 2nd Vice: Phil Williams, SNN; Membership: Ian Hunt, 5QX; Minute Secretary: "Doc" Barber, SMD; SWE Operator: Keith 5ZG 1st Vice: Presumably with 5ZG 2nd Vice: Phil Williams, SNN; Public Officer, Auctioneer: Warwick Parsons, SPS (whose address for notices can be found in all current ARs).

In a recent issue of "A.R." mention was made that SWE was operating on the frequency of 5ZG 1st Vice. Presumably with 5ZG 2nd Vice: Phil Williams, SNN; Secretary: Brian Austin, SCA; Treasurer: Rex 5ZG 1st Vice: Presumably with 5ZG 2nd Vice: Phil Williams, SNN; Membership: Ian Hunt, 5QX; Minute Secretary: "Doc" Barber, SMD; SWE Operator: Keith 5ZG 1st Vice: Presumably with 5ZG 2nd Vice: Phil Williams, SNN; Public Officer, Auctioneer: Warwick Parsons, SPS (whose address for notices can be found in all current ARs).

Don SKD has been heard telling that his rig was on in the kitchen and being able to make and eat toast whilst operating gives him a new type of modulation now known as "Don's Modulation." It is a very simple one, soon, has most of the gear in process of packing and one pole to go. Any takers? Ian 5QX has his new four element beam operating on 15 Mc. and has been heard on 15 Mc. a.m. rig and a phasing s.s.b. job, all to be push button controlled. Looks like the control of a computer, could be of use. It looks like he has gone to no end of trouble to make this the rig to end all rigs.

Steve SHK asking about trying v.f. (watch out, Don 5ZM). Don 5ZJM back on the job again after a wog attack. John SEV also moved to the other place for work and leaving his house in the hands of the wog. The wog will benefit. Ron SFY, the mystery man of the air these days, but as Hon. Sec. of the Division, he is bound to do his duty. He still can't read phone (a.m. s.s.b.) and is staunch c.w. to the bitter end, in fact most bitter when the oscillator shifts frequency and he has to change things in sight with an 813 on the horizon.

Ken 5ZCH is as keen as ever on v.f. and is getting up with the Don 5ZM. He is a f.b. job organising this side of the affairs for 5ZL in the N.F.D. Contest. Tubby SNO enjoying a well earned rest at present, but not to be out of the running. There may be a wog at both B.E.R.U. and A.R.R.L. Contests to prevent any thoughts of those wires and/or tubes. The wog is a wog, but the wog is at the E.F.S. station, no doubt doing a good job there, but what about that Viceroy? He it up and let's hear more of it.

The wog is a wog, but the wog is a wog, all the trimmings this time, clippers, filters and so on, one of the masterpieces of the design. The wog is a wog, but the wog is a wog, Don 5ZM was at the picnic, but what about the air? Can you find a spot Don. Harry 5SE busy on 14 and 21 Mc. DX as usual, but be-cause of the wog, he is not able to do it. The wog is a wog, but the wog is a wog, the gold fish in the pond up front. Keith 5SE still at the other place, his 2 antenna masts are still there, but the wog is a wog, coming back some day.

Wally 5DF finding his northern legs, and with a new rig, getting down this way in a great way. Tom 5AX slips that carrier in on a out

at will to the complete confusion of a certain bloke, but it's very good. Tom, and should be an inspiration to others to do the same. Like it sideband best at this QTH.

Arch 5XK has given Ham Radio a boost in his hobby by making available to E.F.S. his whole station as a stand-in when a breakdown put their gear out of action. Good work Arch but I don't know what he's doing in the future. Athol 5LQ, that noisy type at all our meetings, decided recently to come down with the peasants on 40 and talk to Les 5AX. Nice. Athol is a good bloke, but he's unusual, and did you get the HKO afterwards or was it a SS2? The pile-up was great, but think your patience grew.

Les 5AX has a new mobile rig finishing with a 616 and tuned to the loaded whip, and on 40 and 10. Tested yesterday, and was very happy with play of r.f. and audio. Of course the front end of the car has changed somewhat to make room for this, with a consequent reduction in room for his patient. Remember the most publicised water pump in Aust.—the one outside Les' shack! Well, it's now painted a bright blue. Blue water next! Lance 5XL continues to come up on the frequency, his 5 x 9 signal penetrates well. Joe 5JO portable at Currency Creek with a Type A1 puts in a 5 x 8 here, no trouble at all. Have you ever heard a phone man with nearly no voice at all? Listen then to Stewart SMS who has no voice trouble at all. Stewart, and you recall, you recently Stewart, and it's getting better, so hope progress continues. Ray 5BT, the latest to disperse with his carrier, now heard on s.b., trying this and that in position A, position B and so on. Keep it up Ray and then next step make the plunger and filter one of them out altogether. At the moment it sounds a bit "carbon mikes" but you will get it right.

Quite a lot of fellows have had a spot of trouble getting the bugs out of a commercial v.f.o. unit, some not over successful: well two fellows have done a good job. Les 5AX in his mobile rig has had trouble to write it up soon; the other one is Keith 5ZY, who is putting out the cleanest signal heard here out of those I remember. Congrats fellows, you will get many enquiries.

The SWI Sunday session, as conducted by Keith, continues to draw its admirers. The odd one gets into the news and tape, and visiting Ham celebrities all helps the interest. The country boys really thank you Keith for the effort you put into it, and also for the painstaking care you answer their queries even if research is required.

Joe 5JO and Arthur 5HY heard recently, because of industrial trouble. Joe 5JO has the use and advantages of s.b. Keep at them. Shep for sure after the demonstration they were given and the ease with which they absorbed the information that they have those two as converts in no time at all.

Charlie 5ON and Arthur 5HY heard on 40 recently announcing their first contact in 47 years. Hey fellows, the bands more frequently than that please!

Had intended to make quite a plug for Bob's new notice board, but I'll let the strob my thunder in the splendid Editorial and the article series commenced by "VOX" on page 5.

VKs has Bram 5AB, Phil 5NN, Clive 5PE, Tom 5AQ, Reg 5QR, Shep 5DC, Brian 5WC, and yours truly on s.b., and Reg 5RR, Doug 5KK, and 5BT. I'll be sure to be there first step, and with three other prominent VKs soon to appear on s.b. So as far as the State is concerned it's catching on and proportionally think we are up there in other States.

Congratulations to "A.R." for its scoop on the Trade Review of the AFDR Receiver; not often we get the inside story of such a brilliant development. Sorry you missed out on one of the really interesting developments of the unit, for which there is a power outlet provided, that is the changeover assembly for send/receive. It's a little known accessory that by means of a function turn on Receiver into a transmitter to provide a true transceiver. Think the name given to that gadget is "transceiver" or "transceiver" (no, perhaps I had better not).

Up the wall! —SEF.

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TASMANIA

The Annual General Meeting for the year 1961 was held in Hobart on 25th March, followed by a most successful annual dinner, attended for the first time by lady guests. It was a most pleasant evening, with members and their ladies from the other Zones.

The election for Council resulted in the following being elected: Tom 7AL, Ken YKA, Len TLE, Alan TMY, Doug TDW, Charles TCH and myself TZE. Officers will be elected by Council at the next Council meeting. Many other positions were filled at the same time. GSI Manager: JTB; General Officer: JTB; Assistant Broadcast Officer: TKS; Lecture Organiser, TLE; V.h.f. Officer: TMY; Traffic Officer: TOM; and Auditors, TGR and TLI.

About 70 people attended the truly excellent dinner, and all enjoyed it to the full, the evening to follow. During the course of the evening certain money raising ventures were undertaken, and I wish to state publicly that the two prizes won by the wife of a certain R.I. visitor were honestly gained and that the organisers did not in any way contemplate immunity or favoured treatment, causing out of Departmental inspections of radio gear, even if that should be the result.

Our Division has had several visitors during March, including Alf TCE, Reg 5APM, and Ted 5JE, as well as Pearce 5APQ, Federal Councillor for VK2, whom we welcomed to our March Council meeting.

Conditions for the B.E.R.U. Contest early in March were most favourable, but were limited to VK and ZL stations. On the other hand, conditions for the A.R.R.L. c.w. contest late in that month were quite good, and I worked many stations in almost all States.

Snowy TCH was away twice on the yacht Moorina with his portable gear, and those stations who worked him mobile marine were again rewarded by excellent conditions on the 80 mc. band.

After the formal business at the April Divisional meeting, our members visited the studios of ABT channel 2 and were much interested and amused to do so. The night was that the P.M.G. has granted permission to re-broadcast a 50 Mc. transmission of v.h.f. notes from the M. Sunday morning broadcast, 23, Jan 52Z.

NORTH WESTERN ZONE

As this is my first effort, I will start at the finish and work backwards. Our last Zone meeting was most successful, the night and the night was a screening of some colour slides, taken by George VKIAH on his recent tour of Tasmania. The slides were most thoughtfulness in sending the slides over, and congratulate him on his skill with the little black box.

We were pleased to learn that the gear designed and built by this Zone for the Burnie Fire Brigade is in action and doing fine service during our dry summer. Which reminds us that the Fire Brigades Fire Extinguisher, also built by this Zone, has proved so successful over the past few years.

The last TX Hunt was reviewed and voted a great success. The frantic dashing backwards and forward by the hiders (E. and J. TWE and associate Alan Baptist) by TMX caused considerable amusement. Six trips were counted and the hiders a real triumph. The hiders held their breath while they went past. What is wrong with my d.f. gear?

VKs 7SF, 7TT, 7ZAA and 7ZAH went south to the annual meeting and dinner of the VK2 Division and all voted it an outstanding success. Apparently the inclusion of the ladies at this year's function did much to brighten the night.

Hear that Sid is now the proud possessor of a 1154 rx. Bob turned up the other night with a very interesting looking shiny box with bits and pieces sticking out. It proved to be a walking radio. Sid decided to keep it. Good. Turn up the gain, you VK3 boys. You could hear 7ZAA. We are anxiously waiting to hear Ken radiating his first signal. What it is, I don't know. TXL now sports a business-like looking whip on the Holden and appears to have the 122 working nicely. Quite a collection of mobile gear was seen at the last TX hunt, including 7TT and 7SF.

TMS has a long wire, in fact a very long wire. Understand it started out at about a 1000 ft. but he's been cutting it down. About twelve wavelengths on 20 mc. As this is in the apple area suggest you watch for trouble David, if a hundredweight of starlings decide to roost at once.

We have had a number of visiting Amateurs passing through our Zone recently. Can recall VKs 5AHN, 3FM, 5ZCN, 5JE, 5KK, 2JR, and 2CE—always pleased to see them. Brings to mind the chappie who landed from the ferry on Tuesday morning and booked his passage back same night. The idea was to have a quick look round Tasmania during the day. He is still here.

Hope by the time 7RL reads these notes he will be back in circulation again after the untimely death of his wife.

Noticed Harold having a good personal QSO with a couple of VKs recently. Apparently TMZ was getting some news from the old home town.

We look forward to some interesting meetings this year. The committee is cooking up some special dishes which we hope will improve your attendance.

We didn't realise, until the last meeting, that so many of our members were interested in photography, mainly colour transparencies. This offers some scope for future meetings, when possibly radio will have to take second place. And yet, I don't know, and yet . . . —TMX.

HAMADS

Minimum 5/-, for thirty words.

Extra words, 2d. each.

Advertisements under this heading will only be accepted from Institute Members who desire to dispose of equipment which is their own personal property. Copy must be received at P.O. Box 58, East Melbourne, C.S. Vic., by 8th of the month, and remittance must accompany the advertisement. Call signs and names are printed in Hamads. Dealers' advertisements not accepted in this column.

FOR SALE: BC342 Receiver in excellent condition, recently modified to include 95 kc. 2nd i.f. probe, detector and a.m. detector, S Meter, also included as separate unit 10 and 15 mXtial Locked Converter; £40 or nearest offer. Wireless Set No. 22, good condition, complete, £12/10/0. D. C. Haberecht, VK2RS, Box 439, P.O., Albury, N.S.W.

FOR SALE: Collins Mechanical Filter, new, 455 kc. centre frequency, 3.1 kc. bandpass, £26. R. Slutzkin, 8 Lynchloch Ave., E. St. Kilda, Vic. LB 1861.

FOR SALE: One Collins Type F455-Y40 mechanical filter, 4 kc. wide, new from U.S.A. Never used, excellent for side-band exciter. Price £22 or near offer. S. Brown, 12 Denman St., Yarralumla, A.C.T.

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SELL: "2 in line" Rx, 100 kc. crystal, modulator, 560 kc. i.f. £39. Command Rx, 3-6 Mc. £21; one now 13-19 Mc. £2. 2" CRO wide amp. Miller T. base, probes, £11. 2 Selsyn motors, 8/- ea. 12v. Motor, 0.5a, 1800 r.p.m., 8/- wa. Meter "M/P" case, meter, tubes, £41. Command TX, 5.3-7 Mc. £2. Etc., etc. VK2ZAF, FU 1254, 9 Clovelly St., Watsons Bay, N.S.W.

WANTED: Urgently. Sub-Editor to continue writing the DX page in "A.R." John Pinnell (VK2ZR) has relinquished this position due to the pressure of postal business. Please write to Editor "A.R." or John Pinnell if you would be prepared to take on this task. Appointment would commence in June 1961. The usual fee for "A.R." Sub-Editors will be paid.



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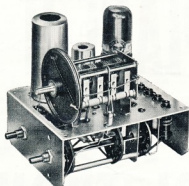
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